

**The
Economist**

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Global impact

America divided

Economic consequences

The Trump era





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to take part in "a severe contest between
intelligence, which presses forward, and
an unworthy, timid ignorance obstructing
our progress."

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Politics



Donald Trump won America's presidential election, an astonishing victory that wrongfooted the predictions of pundits and pollsters. Mr Trump triumphed by winning states in the rustbelt Midwest, such as Pennsylvania and Wisconsin, that had voted Democrat for decades but where voters were receptive to his populist pledges to repatriate jobs and curb free trade. In her concession speech Hillary Clinton wished Mr Trump good luck and urged Americans to unite behind him.

With counting still going on, Mrs Clinton was narrowly ahead in the popular vote. It was Mr Trump's performance in the electoral-college system, which decides the presidency, that **confounded the polls**. He won Ohio by nine percentage points and Iowa by ten, much bigger margins that had been expected, and also took Florida, the biggest swing state.

The Republicans also held on to both chambers of **Congress**. In the Senate the Democrats gained two seats, in Illinois and New Hampshire, giving them 48 out of 100. A run-off for the seat in Louisiana will be held in December.

Voters in California, Massachusetts and Nevada all passed measures to legalise **marijuana** for recreational use in their states.

In **governors' races** Republicans picked up Missouri, New Hampshire and Vermont. The result in North Carolina, where the incumbent Republican has come under fire for

passing an anti-gay-rights law, went down to the wire.

Parliamentary privileges

China's legislature, the National People's Congress, ruled that legislators in **Hong Kong** must take their oaths of office "accurately, completely and solemnly", with no retakes allowed for violators. Its aim was to bar at least two lawmakers from taking up their seats after they had used derogatory language about China when swearing in. In anticipation of the NPC's verdict, thousands of people demonstrated outside the central government's office in Hong Kong.

China's finance minister, Lou Jiwei, was replaced. Mr Lou, who had reached the normal retirement age of 65, was unusual among Chinese bureaucrats for his unabashed free-market views. His successor, Xiao Jie, is also reputed to be a reformer.

The Chinese government passed a tough new law on **cyber-security**. Firms worry that it will be used to force them to turn over security keys and proprietary technologies.



In **Indonesia**, perhaps 100,000 people demonstrated in Jakarta against Basuki Tjahaja Purnama, the city's governor and leading candidate in next year's governor's election, after he made comments they deemed insulting to Islam. Mr Basuki is Christian.

Australia's parliament voted against the government's plan to hold a referendum on gay marriage. The opposition says that a referendum would be expensive and divisive, and that parliament should handle the matter instead.

Park Geun-hye, the embattled president of **South Korea**, said she was willing to be questioned by prosecutors investigating an influence-peddling scandal and offered to cede her power to nominate a new prime minister to parliament. Her approval rating has fallen to 5%.

Scouring for deals

Theresa May, **Britain's** prime minister, went to **India** on her first stop for sounding out post-Brexit trade deals. Although Mrs May talked of shared connections and values her counterpart, Narendra Modi, seemed more concerned about visas and restrictions on Indian immigration to Britain. Despite Mrs May's attempt to present her visit as a success it underlined the difficulties for post-Brexit Britain.

Mikheil Saakashvili, the former Georgian leader who had been serving as governor of the Odessa region in **Ukraine**, resigned. Mr Saakashvili, known as a reformist, accused the government of Petro Poroshenko of fostering corruption by backing two of the country's oligarchs.

Lawmakers in **Hungary** voted down an amendment to the country's constitution that would have blocked compulsory refugee quotas set by the European Union. A referendum on the same topic failed to pass in October.

Montenegro accused **Russia** of backing what it said was a plot to assassinate its prime minister shortly before elections last month. The country is in the process of joining NATO. Russia denied any involvement.

The happy couple

Daniel Ortega won re-election to a third consecutive term as **Nicaragua's** president with 72.5% of the vote. The new vice-president is his wife, Rosario Murillo. Although Mr Ortega might have won a fair election, he was helped by court rulings that prevented his strongest rivals from competing.

Pensioners and civil servants invaded the legislature of the state of Rio de Janeiro in **Brazil** to protest against plans to raise taxes and transport fares and to cut social spending. Earlier, the federal government froze the state's bank accounts because it failed to pay debts.



Tens of thousands of people protested against **Chile's** privatised pension scheme. Some blocked streets and burnt buses in the capital, Santiago. The protesters complain that the scheme pays out less than they had expected. Those who put little in get little in return.

Advancing forces

Iraqi forces made their first push into the city of Mosul proper, **Iraq's** second city, which has been held by Islamic State for the past two years. They captured a district only a few miles from the centre. Outside Mosul, troops discovered a mass grave containing the decapitated bodies of 100 people. In **Syria**, Kurdish troops began a small-scale advance on Raqqa, the capital of the self-styled caliphate.

Egypt's currency continued to slide after the government decided to float the pound.

At least 29 people were killed and another 50 wounded in fighting between rival militias in **Somalia**, ending a week-long ceasefire between two groups trying to control the city of Galkayo.

Good for his golf club

Mr Trump's victory was greeted by a newspaper in **Scotland** with the headline, "Aberdeenshire business-owner wins presidential election".

Business



Markets swung back and forth after Donald Trump's unexpected win in America's presidential election. Stockmarkets dropped as the results unfolded and the Republican racked up state after state, but bounced back exuberantly after he gave a conciliatory victory speech. Trading was brisk in gold and the Japanese yen, traditional havens in times of volatility. The **Mexican peso** suffered further heavy losses amid concerns about the country's relationship with the United States. Mr Trump has promised to tear up NAFTA and curtail Mexican migration.

Bearing fruit

Iran signed a preliminary deal with Total of France and CNPC, a Chinese state-controlled oil company, to develop **offshore** gasfields. It is the first deal of its kind since sanctions on Iran were lifted as part of an agreement with world powers that curtails the country's nuclear programme. But a cloud of uncertainty hangs over future Iranian contracts with multinationals following the election of Donald Trump, who has vowed to scrap the nuclear agreement.

Ferrari's business raced ahead in the third quarter. Net profit was up by 20% compared with the same period last year, to €113m (\$125m), on the back of €783m in sales. The maker of luxury cars also benefited from spending less money on its Formula One racing team. Ferrari was spun out of Fiat Chrysler Automobiles and floated on the stockmarket in January. Its share price has only recently risen above the

price that was set at its IPO. It has continued climbing and is now 10% higher.

Less than a month after it issued a profit warning because of a plummeting pound and Brexit anxieties, **Ryanair** increased its long-term growth forecast and said it now expects to fly 200m passengers a year by 2024, up from the 119m it will carry this year.

Money go round

India's government made a surprise decision to withdraw current 500- and 1,000-rupee banknotes (\$7.50 and \$15) from circulation in an effort to clamp down on black marketeers and corruption. People who hold the cash have until the end of the year to deposit it in savings accounts, but the notes are no longer legal tender and cash-dispensing machines were closed for a day to stop panic withdrawals. New 500- and 2,000-rupee notes were issued featuring a portrait of Mahatma Gandhi.

Navinder Sarao pleaded guilty at a court in Chicago to being the cause of the stockmarket "flash crash" in May 2010. Mr Sarao worked from his parents' home in London. He was extradited to America where the authorities charged him

with manipulating the market by spoofing, which is when a large number of small orders are placed electronically to create the illusion of demand and drive prices higher before they are cancelled.

Tesco Bank fully refunded 9,000 customers after thieves hacked their accounts and stole £2.5m (\$3.1m). The raid was one of the biggest cyberattacks yet on a British bank.

The share price of **Valeant** plunged after the troubled drugmaker cut its profit and sales outlook for next year. The company has been immersed in problems about how it reports its accounts as well as numerous investigations on its method of charging for medicine. At the start of the year Valeant's share price was over \$100; it is now around \$15.

Volkswagen revealed that Hans Dieter Pötsch, the chairman of its supervisory board, was under investigation in Germany for allegedly not telling investors in a timely manner about an emissions-cheating scandal. Some investors in Germany are suing the carmaker for losses they say they incurred because of the delay. Mr Pötsch was vw's finance officer at the time.

Martin Winterkorn, who resigned as chief executive, is already under investigation.

In a closely watched case a federal judge in San Francisco upheld the city's ban on **Airbnb** from doing business on home rentals that have not been registered with local authorities. Airbnb had argued that the ban contravened laws that protect internet firms from culpability for users' transgressions and that it was not its responsibility to enforce the regulation. It will appeal against the ruling.

A steady target?

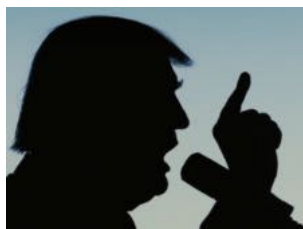
Smith & Wesson, a maker of firearms, wants to change its name to American Outdoor Brands. The company will seek the approval of shareholders at a special meeting next month, at which it hopes there will be no hold-up to its plans to broaden its base and expand its non-weapons-based operations. Its latest earnings overshoot even the higher end of its own forecasts, but switching from its traditional customers to aim more for the "rugged outdoor enthusiast" is a gamble for such a well-known brand.

Other economic data and news can be found on pages 76-77



The Trump era

His victory threatens old certainties about America and its role in the world. What will take their place?



THE fall of the Berlin Wall, on November 9th 1989, was when history was said to have ended. The fight between communism and capitalism was over. After a titanic ideological struggle encompassing the decades after the second world war, open markets and Western liberal democracy reigned supreme. In the early morning of November 9th 2016, when Donald Trump crossed the threshold of 270 electoral-college votes to become America's president-elect, that illusion was shattered. History is back—with a vengeance.

The fact of Mr Trump's victory and the way it came about are hammer blows both to the norms that underpin politics in the United States and also to America's role as the world's pre-eminent power. At home, an apparently amateurish and chaotic campaign has humiliated an industry of consultants, pundits and pollsters. If, as he has threatened, President Trump goes on to test the institutions that regulate political life, nobody can be sure how they will bear up. Abroad, he has taken aim at the belief, embraced by every post-war president, that America gains from the often thankless task of being the global hegemon. If Mr Trump now disengages from the world, who knows what will storm through the breach?

The sense that old certainties are crumbling has rocked America's allies. The fear that globalisation has fallen flat has whipsawed markets. Although post-Brexit Britons know what that feels like, the referendum in Britain will be eclipsed by consequences of this election. Mr Trump's victory has demolished a consensus. The question now is what takes its place.

Trump towers

Start with the observation that America has voted not for a change of party so much as a change of regime. Mr Trump was carried to office on a tide of popular rage (see pages 31-32). This is powered partly by the fact that ordinary Americans have not shared in their country's prosperity. In real terms median male earnings are still lower than they were in the 1970s. In the past 50 years, barring the expansion of the 1990s, middle-ranking households have taken longer to claw back lost income with each recession. Social mobility is too low to hold out the promise of something better. The resulting loss of self-respect is not neutralised by a few quarters of rising wages.

Anger has sown hatred in America. Feeling themselves victims of an unfair economic system, ordinary Americans blame the elites in Washington for being too spineless and too stupid to stand up to foreigners and big business; or, worse, they believe that the elites themselves are part of the conspiracy. They repudiate the media—including this newspaper—for being patronising, partisan and as out of touch and elitist as the politicians. Many working-class white voters feel threatened by economic and demographic decline. Some of them think racial minorities are bought off by the Democratic machine. Rural Americans detest the socially liberal values that urban compatriots foist upon them by supposedly manipulating

the machinery in Washington (see Lexington). Republicans have behaved as if working with Democrats is treachery.

Mr Trump harnessed this popular anger brilliantly. Those who could not bring themselves to vote for him may wonder how half of their compatriots were willing to overlook his treatment of women, his pandering to xenophobes and his rank disregard for the facts. There is no reason to conclude that all Trump voters approve of his behaviour. For some of them, his flaws are insignificant next to the One Big Truth: that America needs fixing. For others the willingness to break taboos was proof that he is an outsider. As commentators have put it, his voters took Mr Trump seriously but not literally, even as his critics took him literally but not seriously. The hapless Hillary Clinton might have won the popular vote, but she stood for everything angry voters despise.

The hope is that this election will prove cathartic. Perhaps, in office, Mr Trump will be pragmatic and magnanimous—as he was in his acceptance speech. Perhaps he will be King Donald, a figurehead and tweeter-in-chief who presides over an executive vice-president and a cabinet of competent, reasonable people. When he decides against building a wall against Mexico after all or concludes that a trade war with China is not a wise idea, his voters may not mind too much—because they only expected him to make them feel proud and to put conservative justices in the Supreme Court. Indeed, you can just about imagine a future in which extra infrastructure spending, combined with deregulation, tax cuts, a stronger dollar and the repatriation of corporate profits, boosts the American economy for long enough to pacify the anger. This more emollient Trump might even model himself on Ronald Reagan, a conservative hero who was mocked and underestimated, too.

Nothing would make us happier than to see Mr Trump succeed in this way. But whereas Reagan was an optimist, Mr Trump rails against the loss of an imagined past. We are deeply sceptical that he will make a good president—because of his policies, his temperament and the demands of political office.

Gravity wins in the end

Take his policies first. After the sugar rush, populist policies eventually collapse under their own contradictions. Mr Trump has pledged to scrap the hated Obamacare. But that threatens to deprive over 20m hard-up Americans of health insurance. His tax cuts would chiefly benefit the rich and they would be financed by deficits that would increase debt-to-GDP by 25 percentage points by 2026. Even if he does not actually deport illegal immigrants, he will foment the divisive politics of race. Mr Trump has demanded trade concessions from China, Mexico and Canada on threat of tariffs and the scrapping of the North American Free Trade Agreement. His protectionism would further impoverish poor Americans, who gain more as consumers from cheap imports than they would as producers from suppressed competition. If he caused a trade war, the fragile global economy could tip into a recession. With interest rates near zero, policymakers would struggle to respond.

Abroad Mr Trump says he hates the deal freezing Iran's nuclear programme. If it fails, he would have to choose between ►►

▶ attacking Iran's nuclear sites and seeing nuclear proliferation in the Middle East (see page 17). He wants to reverse the Paris agreement on climate change; apart from harming the planet, that would undermine America as a negotiating partner. Above all, he would erode America's alliances—its greatest strength. Mr Trump has demanded that other countries pay more towards their security or he will walk away. His bargaining would weaken NATO, leaving front-line eastern European states vulnerable to Russia. It would encourage Chinese expansion in the South China Sea. Japan and South Korea may be tempted to arm themselves with nuclear weapons.

The second reason to be wary is temperament. During the campaign Mr Trump was narcissistic, thin-skinned and ill-disciplined. Yet the job of the most powerful man in the world constantly entails daily humiliations at home and abroad. When congressmen mock him, insult him and twist his words, his effectiveness will depend on his willingness to turn the other cheek and work for a deal. When a judge hears a case for fraud against Trump University in the coming weeks, or rules against his administration's policies when he is in office, he must stand back (self-restraint that proved beyond him when he was a candidate). When journalists ridiculed him in the campaign he threatened to open up libel laws. In office he must ignore them or try to talk them round. When sovereign governments snub him he must calculate his response according to America's interests, not his own wounded pride. If Mr Trump fails to master his resentments, his presidency will soon become bogged down in a morass of petty conflicts.

The third reason to be wary is the demands of office. No problem comes to the president unless it is fiendishly complicated. Yet Mr Trump has shown no evidence that he has the mastery of detail or sustained concentration that the Oval Of-

fice demands. He could delegate (as Reagan famously did), but his campaign team depended to an unusual degree on his family and on political misfits. He has thrived on the idea that his experience in business will make him a master negotiator in politics. Yet if a deal falls apart there is always another skyscraper to buy or another golf course to build; by contrast, a failure to agree with Vladimir Putin about Russia's actions leaves nobody to turn to. Nowhere will judgment and experience be more exposed than over the control of America's nuclear arsenal—which, in a crisis, falls to him and him alone.

The pendulum swings out

The genius of America's constitution is to limit the harm one president can do. We hope Mr Trump proves our doubts groundless or that, if he fails, a better president will be along in four years. The danger with popular anger, though, is that disillusion with Mr Trump will only add to the discontent that put him there in the first place. If so, his failure would pave the way for someone even more bent on breaking the system.

The election of Mr Trump is a rebuff to all liberals, including this newspaper. The open markets and classically liberal democracy that we defend, and which had seemed to be affirmed in 1989, have been rejected by the electorate first in Britain and now in America. France, Italy and other European countries may well follow. It is clear that popular support for the Western order depended more on rapid growth and the galvanising effect of the Soviet threat than on intellectual conviction. Recently Western democracies have done too little to spread the benefits of prosperity. Politicians and pundits took the acquiescence of the disillusioned for granted. As Mr Trump prepares to enter the White House, the long, hard job of winning the argument for liberal internationalism begins anew. ■

Negotiating Brexit

The way forward

Voting was just the start of a long process. To determine what Brexit means is a job for Parliament



THE rallying cry of the campaign for Britain to leave the European Union was that it was time for the country's own national institutions to seize power from the unaccountable courts and parliaments across the Channel. So there is some irony in the fact that, on November 3rd, Brexiteers spluttered with indignation when three British judges, sitting in the High Court in London, ruled that under English law the business of triggering Brexit should fall to Britain's sovereign Parliament, rather than the government alone.

The haziness of Britain's unwritten constitution contributes to the confusion around the ruling (see Bagehot). In fact, the High Court's judgment may delay Brexit by a few weeks, but it does not imperil it. If the government loses its appeal in the Supreme Court next month it will have to seek Parliament's approval before triggering Article 50 of the EU treaty, the legal route to Brexit. Theoretically, MPs could vote it down, but they won't: although most would prefer to remain, they will not ignore the referendum held in June, which resulted in a clear

vote to leave.

Nor should they. But the case provides an opportunity for Parliament to assert its role in the Brexit negotiations, from which it has so far been marginalised by the government (see page 50). Untangling Britain from Europe will be a multi-year process involving hundreds of difficult choices, not a quick separation whose instructions were provided by the referendum's single-word verdict. The details of the proposed divorce should be thrashed out in public by Britons' elected representatives, not determined by their unelected prime minister alone and in secret.

The people have spoken. But what did they mean?

The referendum was supposed to resolve Britain's relationship with Europe once and for all. Yet in laying the In/Out debate to rest, it sparked many more questions. Should Britain seek to stay in the EU's single market, or its customs union? How much should it pay into the EU budget for the privilege? Should it maintain the free movement of people? What sort of border should it have with Ireland? Countless more puzzles await, on everything from patent protection to space exploration.

The referendum result is no help on any of these matters. ▶▶

▶ Nor are the promises made by Brexiteers during the campaign. Some, such as the notion that Britain could maintain its trading privileges with Europe and simultaneously end the free movement of migrants, are mutually exclusive. Others, like the claim that Britain could take back hundreds of millions of pounds a week from the EU to spend on the National Health Service, were simply untrue.

Theresa May, who voted to remain and then became prime minister when her Brexiteer rivals tripped over their own shoelaces, is presumably formulating answers to these questions. Yet Britons are in the dark as to where she intends to lead them. She has published no plan, nor even a statement of objectives. Her comments suggest that she has chosen to prioritise the control of immigration, even if it means giving up membership of the single market (she says only that Britain should go on “trading in and operating within” it). This sort of “hard Brexit” is favoured by the keenest Brexiteers. But it is unclear that the public agree. One recent poll found that most would rather have single-market membership than controls on immigration.

Time to take back control

Trying to read the minds of voters by studying polls or tabloid headlines is the wrong approach. Instead, the path to Brexit should be a matter for transparent public debate. Britain has a body designed for just that purpose. Yet the government has resisted giving Parliament any say in, or even any real oversight of, its strategy. One reason is paranoia about a counter-

revolution. Brexiteers see establishment plots everywhere: from the Bank of England, whose governor they have done their best to hound out, to the High Court, whose judges were labelled “enemies of the people” by one hysterical newspaper. Britain must urgently get over the idea that even to discuss the possible versions of Brexit is to challenge the result of the referendum. The vote in June provided no blueprint; all options must be considered.

The other reason the government gives for its secrecy is that it doesn't want to show its hand in the negotiations: if Britain is to outwit its foes in Brussels, it must keep its strategy under wraps. Parliamentary debate would supposedly give the game away. Yet this misunderstands the task ahead. Negotiating Brexit is not like selling a second-hand car with a dodgy secret under the bonnet. The breaking up of a 40-year legal, political and economic union, and the trade talks that will follow, should be done in the open. In America Congress demands a detailed outline of the president's plans before granting him permission to negotiate trade deals that it promises not to amend. In the EU Brussels is notoriously leaky. Besides, negotiations there do not rely on secret fall-back positions, but a gradual fumbling toward compromise.

Britain did not vote to take back control from Europe only for decisions to be made by a prime minister pretending somehow to channel the will of the people by intuition alone. Parliament is the place for Brexit's knotty details to be untangled. Those who would deny Britons that right are the real enemies of the people. ■

Hong Kong

China's new Tibet

The Communist Party is the author of its own problems in Hong Kong



HONG KONG'S Legislative Council, or Legco, has descended into chaos over how members should take their oaths of office after elections in September. Pro-establishment lawmakers dominate the 70-member chamber, thanks to a voting system skewed towards those who support the government and the Communist Party in Beijing. Despite that, voters elected half a dozen candidates who want Hong Kong to be more independent—some even favour outright separation from China. At their oath-taking two members of a new party, Youngspiration, pledged allegiance to “the Hong Kong nation”, used the imperial Japanese pronunciation of “China”, and displayed a banner declaring that “Hong Kong is not China”. The theatrics by Sixtus Leung and Yau Wai-ching at times seemed puerile. On November 7th the central government made clear that it was in no mood for farce. Its rubber-stamp parliament, the National People's Congress (NPC), issued a ruling aimed at barring Mr Leung and Ms Yau from Legco (see page 28). Few doubt that the NPC will get its way. Other independence-leaning lawmakers may also be ejected.

The intervention has angered many in Hong Kong. Though the NPC oversees the territory's constitution, its rulings were always intended as a last resort in a place that was promised “a

high degree of autonomy” on its reversion from British rule to China in 1997. In this instance, Hong Kong's own judiciary had just begun hearing a case brought by the territory's government aimed at disqualifying the two members. Never before have Hong Kong's courts been pre-empted like this. The ruling undermines the judicial independence that makes the territory so successful as a global financial hub.

Worse, it betrays the NPC's refusal to acknowledge how the Communist Party's own miscalculations have created today's dissent. In 2014 the NPC declared that Hong Kong would not get the full democracy that many thought they had been promised: only candidates approved by the Communist Party's backers in Hong Kong could become chief executive. Public anger erupted into weeks of protests that spawned a “localist” movement. Its members called for self-determination for Hong Kong. The party's hard line fuelled support for them, especially after a Hong Kong bookseller dealing in gossip tales about China's leaders appeared to have been kidnapped by the party's goons and taken to the mainland. Four of his colleagues were also snatched away, either while visiting the mainland or, in one case, from Thailand.

Hong Kong is still far freer and more open than anywhere on the mainland—home to a lively press, a mostly clean and efficient civil service and a political culture still largely unrestrained by fear. But the Basic Law only promises that Hong Kong will keep its capitalist way of life until 2047. Many people ▶▶

▶ worry that China will tighten its grip long before the reprieve runs out. Every sign that it is doing so plays into the localists' hands. Hours before the NPC's ruling, thousands took to the streets in anticipation of what it would say; some shouted "Hong Kong independence" and scuffled with riot police.

Scare tactics

The best way to ease the desperation that feeds the separatists' cause would be to give Hong Kong's citizens what they want: full democracy. Alas, the Communist Party is as unlikely to agree to that in Hong Kong as it is in the rest of China (local elections under way on the mainland are of a kind that North Ko-

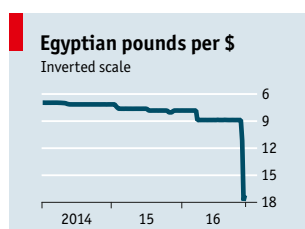
rea would admire—see page 27). The party is spooked by the thought of localists gaining power.

Once, Hong Kong was viewed by China's rulers as their star exhibit for wooing Taiwan back into the fold. Now they are beginning to view the territory as yet another restive province with ungrateful subjects—a better-washed version of Tibet or Xinjiang. China does not appear to be mulling the use of its troops to crush unrest—that would be calamitous for business and the much-vaunted policy of "one country, two systems". But it is baring its teeth. It is not only Hong Kongers who should be concerned. So should all those who look to Hong Kong's freedom and prosperity as a future path for China itself. ■

Egypt's reforms

Two cheers for the general

Belatedly and under pressure, Abdel-Fattah al-Sisi has done some hard, necessary things



When you have no other options left, you may as well bow to the inevitable. That is what Egypt's president did last week. With a budget deficit running at over 12% of GDP and a dollar shortage driving the black-market value of the Egyptian pound to barely half its official price, Abdel-Fattah al-Sisi had no choice. Back in August the IMF had offered the former general a \$12bn lifeline, but it came with tough conditions attached. At long last he has fulfilled them, and the IMF money will soon start to flow. But this must be the beginning, not the end, of his reforms.

So far Mr Sisi has attempted three difficult but necessary things, as demanded by the IMF. On November 3rd he allowed the Egyptian pound to float. It is now trading at a market rate of 18 or so to the dollar; previously it had been propped up at a crazily overvalued rate of about 8.8. However, it is still not clear whether this float is genuine. The pound could easily come under renewed pressure, and there is no guarantee that the government will not suspend the float and see the black market return. External credit-card transactions are still restricted, so the market is not free even now.

Similarly, the other two main IMF conditions have been fulfilled only up to a point. In August parliament passed a long-promised law introducing a value-added tax. It is subject to many exemptions; but it will still bring in badly needed revenue, and the rate is set to rise next year. The work of reducing government subsidies was also advanced last week, with increases of up to 50% in the local-currency price of petrol, after earlier rises in the price of electricity. But both are still well below their true market prices. And, lamentably, food subsidies have not been cut at all—despite their cost, complexity and vulnerability to fraud. Rather than subsidising the price of bread, the government would help more people if it simply handed out cash to poor Egyptians.

Still, give the general his due: he has done enough of what the IMF asked to get his money, and he is hardly the first leader to resist doing painful things until he had no alternative. What is crucial is what happens next. First, it is essential that there is no backsliding on the reforms. The economy may start to re-

bound quickly. Since the currency has fallen by half, Egypt is now much more attractive to foreign investors and even to tourists, so long as they are prepared to forget about last year's Islamic State bomb attack on a plane flying out of Sharm el-Sheikh (not to mention the torture and murder of an Italian researcher). If the pressure on Mr Sisi's budget eases, he may well be tempted to reverse course on the subsidies.

Second, the government must not imagine that its work is now done. Egypt remains a deeply frustrating place to run a company, ranking a woeful 122nd in the World Bank's ease-of-doing-business index. The seizure of thousands of tonnes of "overstocked" sugar from PepsiCo and a number of local manufacturers last month will hardly have improved the country's reputation. The army still interferes in the economy, a habit that has only worsened since Mr Sisi installed himself in a coup in 2013. A long-established tradition of crony capitalism, with large incumbent firms favoured in myriad ways, from licences to access to capital, makes it hard for startups to breathe. A wholesale onslaught on red tape should be Mr Sisi's next big target. And too much public money is squandered on grand projects, such as widening the Suez Canal, which have failed to bring much benefit. The money would be better spent fixing decrepit infrastructure and improving public services.

Sisi the day

Most important, though, is how Mr Sisi handles the inevitable reaction to his reforms from ordinary Egyptians, who are bound to feel the pinch (see page 43). Inflation is already painfully high, at 14% or so, and costlier imported fuel and food will lift prices higher this year. It was precisely the fear that discontent over rising prices would fuel instability (in a region that has seen mayhem) that held Mr Sisi back for so long. Protests are likely. He must not meet them by over-reacting with tear-gas, baton-blows and mass arrests. Scaling back inefficient subsidies and using the money to make direct cash payments to the poor would be a better approach. The protesters, for their part, should make their points peacefully.

It is galling when an undemocratic government asks for sacrifices. But investors and tourists will not return to a country that looks as though it is once again on the brink of chaos. If Egypt stays the course, the short-term pain of reform will eventually be followed by the long-term benefits of growth. ■

Handling central banks

The issue of central-bank independence is a complex and difficult one ("Hands off", October 29th). Monetary policy has significant social and political effects and as such should be subject to some form of political accountability. The artificial institutional separation between fiscal and monetary policy is unhealthy. In Britain it allowed George Osborne to pursue a policy of fiscal austerity through the Treasury while leaving the Bank of England to do all the heavy lifting in monetary policy. The same has happened in the euro zone.

The vast majority of central banks across the world do not have operational independence. Neither did most of the European central banks until the launch of the euro. In the Netherlands, for example, the final decision on monetary policy rested with the minister of finance.

It is essential that the question of what "central-bank independence" means in practice is the subject of public debate. In the current difficult political atmosphere, how does one balance the judgments made by technocrats with the political accountability that is essential if we are not to continue eroding people's confidence in democracies? As John Kay stated in his foreword to our recent report, "No democracy can accept that policy decisions which have large effects on the distribution of income and wealth, on financial stability and economic growth, are off limits."

JOE ZAMMIT-LUCIA

Trustee
Radix
London

I agree with your defence of the Bank of England's independence, particularly when it is levelled against those who brought us Brexit. The likes of Michael Gove wish to return the bank's responsibilities to government so that economics can be politicised further to win votes. The complex topic of economic policy should be removed from the political

minefield as far as possible or, at least, to hold politicians to account when they make brazen remarks about the public finances without the slightest acknowledgment that economics is not a right-wrong subject. You can never have enough experts.

GABRIEL OSBORNE
Bristol

Poland's film stars

Andrzej Wajda was truly a great film-making voice of Poland in the 20th century (Obituary, October 29th), but Krzysztof Kieslowski was his equal. Wajda focused on Poland's troubled history under the shadow of the Soviet Union, but it was Kieslowski who chronicled, subtly and sympathetically, the moral evasions that the communist system provoked. Both were remarkable humanists.

There is however no question that "Interrogation", made in 1982 and officially released in 1989, was written (with Janusz Dymek) and directed by Ryszard Bugajski. Wajda's role was to co-produce it, which was a crucial one but not the same as making the film, as your obituarist writes.

TIM CAWKWELL
Norwich, Norfolk

Despondent in Denmark

You are right to question the increasingly irritating portrayal of Danes as a bunch of happy clappies living close to Nirvana ("Cocoa by candlelight", October 1st). Denmark is one of the world's largest consumers of *lykkepiller* (happiness pills, or antidepressants), for instance. Virtually all organisations are grappling with stress. And its young people are increasingly baffled and bewildered by the complexities of the modern world. My wife is a professionally qualified family therapist, who specialises in teenagers. She is not short of clients.

Denmark's problems are those of a rich, peaceful, well-functioning society. But they are problems, nevertheless.

WALTER BLOTSCHER
Haarby, Denmark

Taking companies to court

Because companies encourage risky behaviour, Schumpeter says, it is right that prosecutors go after the company itself for wrongdoing rather than "individual miscreants" (October 29th). The idea of prosecuting corporations has become an obsession, perhaps fuelled by the desire to generate funds for governments. However, crimes are committed by real people, not legal entities. If one of the principal objectives is to deter wrongdoing, then the prosecution of the corporation itself does nothing. What deters individuals is the personalisation of responsibility and the fear that blame will be attributed to them when things go wrong, coupled with the threat of enforcement action, potential prosecution and even jail time.

The real question is how to persuade companies to report illegal activity voluntarily. If it is likely that the company itself will be prosecuted then there is little incentive to do so. The consequence is that things are swept under the carpet and authorities are left to make their own discoveries. Proper incentives to self-report, perhaps by way of some promise of a lesser penalty for the corporation itself, such as a civil settlement, will ensure the right flow of information to regulators, enabling them to act against those individuals who have perpetrated the crimes, rather than damaging shareholders and employees who are the very people that the system ought to protect.

JONATHAN PICKWORTH
Partner
White & Case
London

Schumpeter lauded firms like Uber and Airbnb for disrupting "markets that are governed by outdated regulations". But what is the point of having a system of regulations if people can simply decide arbitrarily that some are justified and some are obsolete? Who decides that a business illegally operating taxis or rental accommodations is an acceptable testing of the rules, while

one that enables the distribution of copyrighted music or psychotropic drugs is not? Our economic system is built on the assumption that competitors abide by the same rules.

KENNETH KUNIN
Montreal

Mexico's number one

During her life Frida Kahlo was indeed overshadowed by her husband Diego Rivera ("Evolutionary tales", October 29th). However Frida, as she is generally known, has exacted posthumous revenge. According to a study from the Massachusetts Institute of Technology in 2014, Frida is the best-known Mexican worldwide. Rivera did not even make the top ten.

PHILIP L. RUSSELL
Austin, Texas

A democratic choice

In the October 29th issue *Banyan* referred to Xi Jinping as China's "dictator". On the very next page, he appears as China's "president" ("China is struggling to keep control over its version of the past"). As our own president remarked a while ago, "words matter". Please break the tie and let us know which title is more appropriate. Furthermore, please stop confusing this American, who is writing this letter as he is about to cast his vote for either a president or a dictator.


JEFFREY MILLER
North Woodmere, New York ■

Letters are welcome and should be addressed to the Editor at The Economist, 25 St James's Street, London SW1A 1HG
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The **Rule** of **72**




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Insurance
is
IMMORAL



How
Insurance
Became
Moral



Indifference Curves
Cannot Intersect





The piecemaker

Also in this section

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20 A new finger on the button

For seven decades America has been the guarantor of global order. It may now become a force for instability

WHEN Donald Trump started to assemble his national-security team, he asked his advisers: "Do you know what constant pour is?" At least one of the generals present confessed that he did not. Well, explained Mr Trump, it is the process whereby the concrete foundations of buildings cannot be allowed to set before being filled; cement mixers must be lined up for many blocks at the ready. The lesson was: the generals may know a lot of fancy jargon, but so does he.

It was quintessential Trump: prickly yet boastful. The assertion that the world is complicated is but a con-trick to befuddle honest Americans who wonder why their country seems less feared by enemies and less respected by allies. In his telling, America's problems are simple, self-inflicted and reversible. It is hard to think of a president-elect less versed in the workings of the world than Mr Trump; or of one more willing to upturn the global order shaped by America in the seven decades since the end of the second world war.

Mr Trump has described his foreign policy in only the vaguest terms, preferring such bumper-sticker slogans as "America First" to detailed plans. To the extent that it can be divined, his programme involves threatening to slap tariffs on imports from China and Mexico; demanding that allies like Japan and the Europeans pay more for

their defence; and being nicer to strongmen like Russia's president, Vladimir Putin. A good president, like a real-estate mogul, must be "prepared to walk" away from a bad deal; and it helps if he is unpredictable. Richard Nixon may have resorted to the madman theory of diplomacy to frighten enemies during the cold war. But Mr Trump's politics of deliberate uncertainty is terrifying America's friends and partners: no trade treaty, international institution or alliance is sacrosanct.

America's allies, though mostly horrified, are scrambling to congratulate him in the hope of limiting the damage he might cause. Other demagogues who denounce elites and the liberal, multilateral, rules-based order are elated. Florian Philippot, an adviser to Marine Le Pen, leader of the xenophobic National Front (FN) in France, exulted on Twitter: "Their world is falling apart. Ours is being built."

The one area of foreign policy about which Mr Trump's views are clear and consistent is trade. He has grumbled about it since the 1980s, when he would appear on tv and claim that Japan was robbing America blind (by selling Americans reliable cars at reasonable prices). On the campaign trail, he has redoubled his anti-trade tirades. Whether addressing grey-haired ex-factory hands in Ohio or greeting reporters at his brass-plated skyscraper in

Manhattan, he has denounced incompetent and corrupt elites for shipping jobs abroad. China is "killing us", Mr Trump told *The Economist* last year. "The money that they took out of the United States is the greatest theft in the history of our country." (In fact, the money in question was willingly paid for Chinese products.)

Depending on the week, Mr Trump's remedies have included a promise to declare China a currency manipulator, and threats to slap tariffs of 5%, 10% or even 45% on imports to close America's trade deficit (see chart 1, next page). He has vowed to tweak the tax code and browbeat the bosses of such giant firms as Ford, Apple and Boeing until they make more of their products at home.

Miffed with NAFTA

Speaking before the election, Mr Trump's senior trade adviser, Dan DiMiccio, the former boss of Nucor, a big steelmaker, set out several actions the president will take in his first 100 days. These include starting to renegotiate trade pacts such as the NAFTA accord with Mexico and Canada (and threatening to pull out if they won't play ball). Every future trade agreement, among them the Trans-Pacific Partnership (TPP) between America and 11 other Asia-Pacific countries, and the Transatlantic Trade and Investment Partnership (TTIP) with the ►►

▶ European Union (EU), will be put on hold. “Whether they go forward depends on whether we can return to balanced trade, and whether they add to GDP growth,” Mr DiMicco said. “The era of trade deficits is over. It will be: let’s talk, but otherwise we put tariffs on.”

Mr DiMicco cited the decision by Ronald Reagan (a favourite of Trump supporters) to impose a 45% tariff on Japanese motorcycles in the 1980s: “That brought people to the negotiating table.” Yet it seems implausible that trading partners will stand idly by should America raise tariffs. A trade war would come as protectionism is already on the rise. The World Trade Organisation predicts that global trade this year will grow less quickly than the world’s GDP for the first time in 15 years.

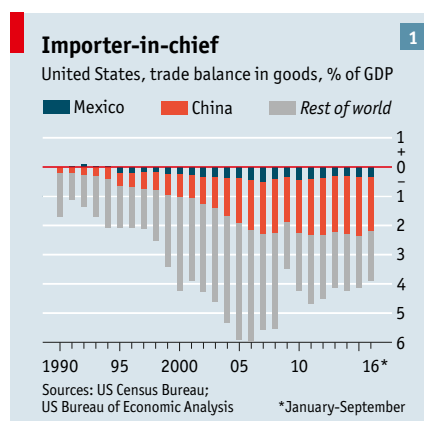
The Peterson Institute for International Economics (PIIE), a think-tank, has estimated the impact of Mr Trump’s trade policies under three scenarios, ranging from “aborted trade war”, in which Mr Trump is forced to lower tariffs within a year of imposing them, to a “full trade war” with Mexico and China. In the former case, global supply chains are disrupted and 1.3m private-sector American jobs are lost; in the latter, the damage includes the loss of 4.8m American jobs and would spill over into the services sector, too. Adam Posen of the PIIE says Mr Trump’s trade policies would be “horribly destructive”.

Neighbour makes bad fences

They may prove even more devastating abroad, especially in Mexico, where the peso slumped against the dollar. Enrique Peña Nieto, the Mexican leader, was chastised for inviting Mr Trump for talks in August. Mr Trump’s habit of insulting Mexican immigrants and his rallying cry—that he would build a wall along America’s southern border and make Mexico pay for it—have earned him much hostility in Latin America. But Mr Peña may now feel vindicated, as he has to deal with the president of his giant northern neighbour.

Mr Trump’s victory comes, cruelly, just as left-wing populism in Latin America is in retreat, opening opportunities for closer trade between the two halves of the Americas. Before the election, Latin Americans’ opinion of the United States was warmer than at any point this century. Mr Trump’s victory risks rekindling anti-*yanqui* sentiments, especially if he repudiates Barack Obama’s policy of normalising relations with Cuba.

Across the northern border, meanwhile, Canada frets about the economic harm that will be caused should NAFTA collapse. The United States buys about three-quarters of Canada’s exports. Some Canadians fondly imagine that a wave of young, well-educated Americans will move north, as they did during the 1970s. However, this is unlikely. A Trump presi-

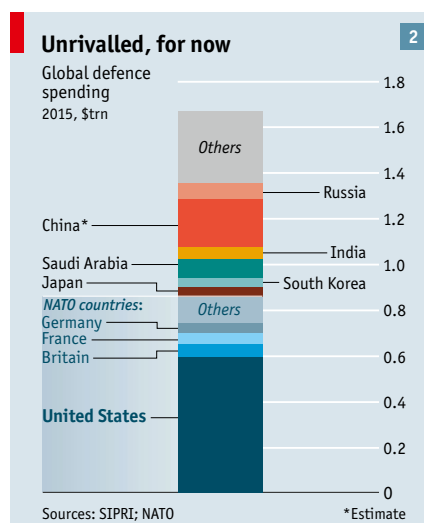


dency will hardly scare people in the way that the prospect of being drafted to fight in Vietnam did. (As Mr Trump doubtless recalls, though he was lucky enough to receive five deferments during the war.)

Mr Trump has repeatedly said that America’s willingness to defend its traditional allies should depend on whether they pay their fair share for their defence—which in Mr Trump’s view includes paying America in cash to cover the costs of protecting them. America has a justified complaint: it spends far more on defence than its European and Japanese allies put together (see chart 2). But Mr Trump risks upending the basis of post-war global security—particularly in Asia, where China is menacing its neighbours; and in Europe, where Russia has annexed Crimea and stirred a proxy war in eastern Ukraine.

In Asia American strategy has for decades been built on three pillars: open trade and the prosperity that flows from it; strong formal and informal alliances, from Japan to Australia to Singapore; and the promotion of democratic values. It is not clear that Mr Trump cares for any of them.

Mr Obama’s “pivot to Asia”—a promise to pay more attention to the world’s largest and most buoyant region—is under threat. Mr Trump will unnerve Japan, America’s



staunchest friend in Asia. China may risk greater assertiveness—particularly in the South China Sea, where it has built up several reefs and atolls into military bases.

Mr Trump has suggested that Japan and South Korea should develop their own nuclear weapons rather than shelter under America’s umbrella—a recipe for regional instability and a nuclear arms race. Neither country is close to considering the possibility, and Mr Trump has played down the remarks. But fear will grow of American disengagement from Asia.

The TPP trade deal, the economic pillar of Mr Obama’s pivot to Asia, was sold as an attempt to set the world’s economic rules before they are dictated by China. But Mr Trump sees it as allowing China to come in through the back door. TPP’s proponents held out a faint hope that it could pass in the lame-duck Congress. That is now impossible. Mr Trump also says he will pull America out of the Paris climate treaty and abrogate Mr Obama’s climate agreement with China—one of the few bright spots in Sino-American relations.

Though China would be hurt by a trade war with America, Chinese hawks spot a geopolitical opening. They see Mr Trump’s election as confirmation that China is a rising power and America a declining one. “We may as well let the guy go up and see what chaos he can create for the US and the West,” wrote *Global Times*, a Chinese newspaper with links to the armed forces.

The thin Baltic tripwire

Mr Trump’s victory is sending shock waves through NATO, the world’s most successful military alliance. In his book “The America We Deserve” in 2000 he said that eastern Europeans should be left alone to fight out their ancient feuds. The most vulnerable point for NATO will be the Baltic states—lying on a small, flat, thinly populated strip of land with few natural frontiers and nowhere to retreat to. Providing a credible defence for Estonia, Latvia and Lithuania has been NATO’s biggest headache in recent years. The alliance has started to rotate tripwire forces through them and has cobbled together rapid-reaction forces. But NATO’s ability to deter Russia rests chiefly on Russia believing that America will act decisively and speedily in a crisis.

Fearing that Mr Trump would not, the Baltic states will now start preparing for the worst—they have boosted their territorial defences and conduct regular drills in guerrilla warfare; and they have developed defence ties with neighbouring countries such as non-NATO Sweden and Finland. They worry that Russia might seek to exploit the lame-duck period in Washington to create new facts on the ground.

Whether or not Russia takes such a gamble, the Kremlin is already crying victory. Two days before Americans voted, Dmitry Kiselev, Russia’s propagandist-in-▶

▶ chief, declared that the campaign had been the dirtiest in America's history: "It was so horribly noxious that it only engenders disgust towards what is still inexplicably called a 'democracy' in America." Mr Putin hopes that if Western democracy seems less attractive, there is less risk of more "colour revolutions" in Russia's backyard.

That Mr Trump openly admires Mr Putin is a welcome bonus for the Kremlin. Mr Putin expressed the hope that Russian-American relations would improve. His dream is to see Western sanctions lifted and for Mr Trump to agree to a Yalta-style deal that would recognise a Russian sphere of influence in its "near abroad".

There are jitters in the Middle East, too. Mr Trump has mocked the folly of toppling

dictators in Iraq or Libya (though he once backed both interventions). He has also blamed American leaders for not seizing oilfields in Iraq. "We go in, we spent \$3trn. We lose thousands and thousands of lives, and then look, what happens is we get nothing. You know it used to be to the victor belong the spoils," Mr Trump said in September.

Mr Trump called Mr Obama the "founder" of the Islamic State (IS), because his withdrawal of troops from Iraq created a vacuum in which the terrorist group thrived. Without offering much detail, Mr Trump has said he would "bomb the shit out of" IS. He has also appeared to accept the notion, pushed by Russia, that Syria's dictator, Bashar al-Assad, is a bulwark

against Sunni extremism rather than a despot who provokes it. That suggests that Mr Trump will probably let the Pentagon finish the job of driving IS out of the Iraqi city of Mosul if it has not already fallen by the time he is inaugurated on January 20th. But he has shown little appetite for sustained engagement in the Middle East.

Critics, and there are many among veterans of recent Republican administrations, note that many of Mr Trump's ideas would break American or international law. They shudder when he calls for the return of torture for terrorist suspects, and for the killing of terrorists' families as a deterrent (which would be a war crime).

Gulf Arab leaders have been appalled by Mr Obama's policy—his support for revolts against Arab dictators, his reluctance to be drawn into the war in Syria and his decision to sign an agreement with Iran to limit its nuclear programme. But they are even more worried about Mr Trump's unpredictability and possible isolationism. "Russia, Iran, Iraq's Shia militias, Syria and Hizbullah all benefit from America's vacuum in the region and support Mr Trump," says Oraib Rantawi, a Jordanian analyst. To that list add Egypt's strongman, Abdel-Fattah al-Sisi, to whom Mr Trump has promised "loyal friendship".

Like Mr Obama, Mr Trump refers to the Gulf's oil-rich Sunni monarchies with disdain. He has also caused outrage by showing contempt for Muslim migrants and demanding that "radical Islam" be named as the true cause of terrorism.

"Trump will cut off America's aid to the opposition," says a forlorn Syrian rebel spokesman in Istanbul. "Aleppo will fall to the regime and opposition units either dissolve or shift to the extremists." Iraq's marginalised Sunnis are similarly downbeat. Many had hoped that American forces would stay the course after the expected recapture of Mosul to oversee their rehabilitation in Iraqi politics.

When talking about the Israeli-Palestinian conflict, Mr Trump pointedly does not mention the need to establish a Palestinian state. The Israeli prime minister, Binyamin Netanyahu, will probably be happy to have an American president who never presses him to trade land for peace or stop Jewish settlement-building in the West Bank. But those who know Mr Netanyahu say he is sceptical. "Bibi is risk-averse and hates surprises," explains an ally in his Likud party. "Trump is unexpected and volatile and Bibi is like many in the Republican establishment who see him as a wild card and don't trust him."

America's dealings with Iran seem likely to shift in ways that, paradoxically, may please the hardliners there. During the campaign, the state broadcaster devoted much airtime to Mr Trump's mudslinging. The Supreme Leader, Ali Khamenei, joined in, praising the "straight-talking" Mr ▶▶

The world reacts

"Do nightmares come true?"

"Russia is ready and wants to restore fully fledged relations with the US." *Vladimir Putin, Russia's president*

If he [Trump] is in office for eight years, he will successfully be the first US president to lead America's economy from number one in the world to number two. Yes he can!" *Zhang Zhaozhong, Chinese military commentator, Weibo*

"My wife's latest comment: one Donald is more than enough!" *Donald Tusk, president of the European Council, on November 5th, Twitter*

"We extend our sincere congratulations...We would take this opportunity to invite you to visit Europe for an EU-US Summit at your earliest convenience." *Joint letter from Donald Tusk and Jean-Claude Juncker, President of the European Commission, on November 9th*

"What great news. Democracy is still alive." *Viktor Orban, prime minister of Hungary, on Facebook*

"We have to assume that American foreign policy will be less predictable for us...Nothing will get easier, much will get harder." *Franz-Walter Steinmeier, foreign minister of Germany*

"As of this night Europe is more alone, and I don't believe it is equipped for that." *Benedetto Della Vedova, Italy's junior foreign minister*

"We once again thank Americans for keeping this warmonger [Hillary Clinton] from the reins of power." *Editorial in The Herald, Zimbabwe*

"Because of Melania, Sevnica is now more recognised in the world. And we hope that she will now bring her husband, the new president, to Slovenia and to Sevnica." *Srečko Ocvirk, mayor of Sevnica (population 5,000), birthplace of Melania Trump (née Knauss)*

"I consider the Trump hypothesis a nightmare. Do nightmares sometimes come true? They do, but I prefer not to think about it." *José Serra, Brazil's foreign minister, in Correio Braziliense*

"Travel to the US while you are still allowed to." *Facebook ad by Royal Jordanian Airlines*

"Aberdeenshire business-owner wins presidential election." *The Buchan Observer, Peterhead, Aberdeenshire*



► Trump. Confidants cheered Mr Trump's anti-Saudi rhetoric and his good relations with Mr Putin. And so what if he loathes the nuclear agreement, or assents to Congress killing it off? Iranian conservatives have always viewed that deal with grave suspicion, as part of an American plot to gain control of their country.

Following close on Britain's referendum to leave the European Union, Mr Trump's election will boost populists everywhere, especially in Europe, by breaking the myth that anti-establishment groups are unelectable. The next test will be Italy's constitutional referendum in December. A defeat for the prime minister, Matteo Renzi, which seems likely, could lead to the undoing of his government and the rise to power of the populist Five Star Movement, which wants a referendum on the euro.

Trumpeting the Donald

Then there is France. Could Marine Le Pen, leader of the ultranationalist FN, win the presidential election next spring? Before Mr Trump's victory, the question seemed absurd. Polls suggest that she will win one of two second-round places. This in itself would be a victory of sorts, repeating the achievement of her father, Jean-Marie Le Pen, in 2002. But no polls have indicated that she could beat any of the centre-right candidates likely to face her. Now, her victory is no longer unthinkable. There was no disguising the delight at the FN headquarters in Paris. A jubilant Ms Le Pen, congratulated the American president-elect and praised the "free" American people. Even Mr Le Pen, who has fallen out with his daughter, tweeted: "Today the United States, tomorrow France!"

The parallels between Ms Le Pen and Mr Trump are striking. Both trade on simplified truths and have built platforms on rejection and nostalgia. Both have cast themselves as outsiders who stand up for people scorned by the elite. Mr Trump and Ms Le Pen are both protectionist, nationalist and fans of Mr Putin. Mr Trump wants to scrap trade deals and is impatient with encumbering alliances. Ms Le Pen wants a referendum on "Frexit"; if it passed it would spell the end of the EU.

One difference is rhetorical excess. Ms Le Pen is in some ways a Trump lite. She may share many of his reflexes, but her language is more cautious. She has never, for instance, called for all Muslims to be banned from entering France, but rather for an end to an "uncontrolled wave" of immigration. She does not promise to build walls, but to control borders. The problem, she says, is not Islam but what she calls the "Islamification" of France. In France, where Ms Le Pen is trying to transform a one-time pariah movement with neo-Nazi links into a credible party of government, such nuances remain an asset.

Nuclear codes

A new finger on the button

Mr Trump will soon control America's nuclear codes

IN A ritual out of sight of the cameras on Inauguration Day in January, America's "nuclear briefcase" will change hands and President Donald Trump will receive a card, sometimes known as the "bis-cuit". The card, which identifies him as commander-in-chief, has on it the nuclear codes that are used to authenticate an order to launch a nuclear attack. At that point, should he wish, Mr Trump can launch any or all of America's 2,000 strategic nuclear missiles.

There are no constitutional restraints on his power to do so. Even if all his advisers have counselled against it, as long it is clearly the president giving the command, the order must be carried out. There are no checks and balances in the system. Moreover, once the order is given there is likely to be only a matter of minutes in which it could be rescinded. Once the missiles are flying, they cannot be

called back or disarmed. Mr Trump, from what he has said, does not take this responsibility lightly. Indeed, he has often stated that he believes nuclear weapons to represent the greatest threat to humanity and that he will not be trigger-happy, "like some people might think". But in common with his predecessors, he does not rule out their use.

With little more than ten minutes to take a decision that could kill hundreds of millions of people, even the calmest individual would be under intolerable stress if informed that America was under imminent attack. It is not Mr Trump's fault that the system, in which the vulnerable land-based missile force is kept on hair-trigger alert, is widely held to be inherently dangerous. Yet no former president, including Barack Obama, has done anything to change it.

Of greater concern would be how Mr Trump might behave in an escalating confrontation if Russia were to rattle its nuclear sabre even more loudly. It is possible that his apparent desire to be buddies with Vladimir Putin might help defuse a dangerous situation. He is, however, notoriously thin-skinned and unable to stop himself responding to any perceived slight with vicious (verbal) attacks of his own. He also revels in braggadocio and is known to be reluctant to take advice. Marco Rubio, a rival for the Republican nomination, questioned whether he had the temperament to be put in charge of the nuclear codes. So did Hillary Clinton. They were right to do so. But it is now Mr Trump, not them, who takes the biscuit.



Viktor Orban, the prime minister of Hungary and prototype European populist, who talks of creating an "illiberal" democracy, was one of the few European leaders to endorse Mr Trump's campaign. The Polish government, which is in many ways as populist and nationalist as Mr Trump, has been more cautious. It may dislike Muslim migrants, but it fears Russia more, and would love to see more American troops deployed on its territory.

With America in isolationist mood, Britain on the way out and France paralysed, it falls increasingly to Germany to preserve the European order. Many Germans are horrified by Mr Trump's disdain for due process. "What sets Trump apart from any major US politician—let alone presidential candidate—in living memory is his overt, chilling contempt for the fun-

damental principles of the constitution. That is familiar to a German in the worst possible way," says Constanze Stelzenmüller of the Brookings Institution, a think-tank. Yet the chancellor, Angela Merkel, weakened by the past year's refugee crisis, will be largely reduced to "lots of hand-wringing and rhetoric and virtually no action", says John Kornblum, a former American ambassador to Germany.

If Mr Trump's triumph augurs yet more populist victories elsewhere, the EU itself may find it hard to hold together. A remote, complex and technocratic body, the EU is the perfect whipping boy for demagogues. As Gérard Araud, the French ambassador to Washington, put it in a tweet (now deleted): "After Brexit and this election, everything is now possible. A world is collapsing before our eyes." ■



Japanese politics

Abe ascendant

TOKYO

Shinzo Abe has accumulated unprecedented power

THE average tenure of Japanese prime ministers since the second world war has been just over two years. Before Shinzo Abe, the incumbent, took office in 2012, Japan ran through six prime ministers in as many years (including a prior, year-long stint by Mr Abe himself). So the fact that he is nearing four years in the job this time is remarkable in itself. But he seems to be just getting started. His Liberal Democratic Party (LDP) recently decided to extend its leader's maximum term from six years to nine. That paves the way for Mr Abe to remain in office until 2021, which would make him Japan's longest-serving post-war leader.

Admittedly, Mr Abe would need to win both a party-leadership contest and a lower-house election to stay in power that long. But he is an extremely successful campaigner, having led the LDP to victory in two elections for the lower house and two for the upper. Mr Abe's current coalition government holds a commanding majority in both houses of the Diet. Mustering the two-thirds majority in each house that is required to change the constitution seems within his grasp. "He is very powerful," says an awed lawmaker.

Mr Abe's success does not come from playing it safe: he has pushed for a number of unpopular policies. The government's plan to restart many of Japan's nuclear-power plants, most of which were idled after the Fukushima Dai-ichi disaster in

2011, is anathema to many Japanese. In early November the LDP began pushing the Trans-Pacific Partnership, a trade deal about which Japanese feel distinctly lukewarm, through the Diet. Legislation passed last year, which lifted some of the restrictions on the Self-Defence Forces (SDF), as Japan's army is called, was deeply unpopular. Should Mr Abe follow through on his desire to change the constitution to remove the pacifist language still hemming in the SDF, he would doubtless provoke even greater ire.

Even where Mr Abe's goals and those of voters are aligned, such as over the need to revive Japan's economy, his government has disappointed. In a poll published in late October by the Pew Research Center, 68% of Japanese said they were unhappy with the state of the economy. Inflation remains far below the government's 2% target. Wages have risen only slightly.

Teflon Shinzo

In spite of this, Mr Abe remains personally popular. A recent poll put his government's approval rating at 60%. This is partly due to his adversaries' weakness. He returned to power in 2012 promising national renewal after a disastrous three-year stint in government by the Democratic Party of Japan (DPJ, the main opposition party, now known as the Democratic Party, or DP). The DP's image has still not recovered; the party is trailing far behind the LDP

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in the polls. It was recently trounced in two by-elections. "He was lucky in his timing," says a DP lawmaker. "We had utterly failed, and he came up with a clear, concrete, alternative message."

Likewise, within the LDP, Mr Abe has few immediate rivals. Electoral reforms in the 1990s greatly reduced the clout of its once all-powerful factions. Mr Abe has empowered Yoshihide Suga, the intimidating chief cabinet secretary, to keep them in line. Colleagues with ambition—such as Fumio Kishida, the foreign minister—have been appointed to grand posts from which they cannot openly criticise him. At the last leadership election, in 2015, he ran unopposed after a would-be rival could not secure the necessary 20 nominations from LDP lawmakers. "As long as he keeps winning elections, we're happy," says Taro Kono, a legislator from the party.

But Mr Abe learned much during his five years in the wilderness, too. Although he does not hide his ambition to change the constitution, he is careful to talk mainly about issues that Japanese people care more about, most notably the economy. "He came back as a product launch, a political slogan: Abenomics," says Jeff Kingston of Temple University. He is a whirlwind of policies, initiatives, trips and summits. "He chases one issue after another, leaving no room for the country or press to get bored," says someone close to him. "Or to notice things left undone," adds Koichi Nakano of Sophia University.

All this has had an important effect on the country's psyche, says Natsuo Yamaguchi, the head of Komeito, the LDP's coalition partner. "People are starting to regain the confidence that the past 20 years of political confusion, inward-looking foreign policy and economic stagnation led them to lose, in both Japan and themselves," says Mr Yamaguchi. Mr Abe says ►►

Ferdinand Marcos

Hail to the thief

The Philippine government offers a hero's burial for a murderous kleptocrat

DURING the 20 years Ferdinand Marcos spent as president of the Philippines, his official salary never rose above \$13,500 a year. Yet by 1986, when the “people power” revolution prompted him and his wife Imelda to flee into exile in Hawaii, they had amassed a fortune. Mrs Marcos left behind her shoe collection, but her husband brought with him jewellery, gold bricks and freshly printed Philippine currency, together worth around \$15m. In all, he and his cronies are thought to have plundered perhaps \$10 billion. What is more, during his time in office thousands of Filipinos were tortured, jailed without due process or murdered by the regime's thugs.

Marcos died in Hawaii; since 1993, his embalmed remains have been displayed in a glass box in his home province of Ilocos Norte. Rodrigo Duterte, the erratic strongman now running the Philippines, believes the dead dictator deserves better: he has approved the Marcos family's long-standing request to bury their patriarch in Manila's National Heroes' Cemetery, with full military honours—an idea all Marcos's other successors rejected.

Mr Duterte insists that Marcos is entitled to such a burial not because he is a hero (“the issue about his heroism is political” is Mr Duterte's baffling deflection) but because he was a soldier—never mind that Marcos's claims to military valour during the second world war were largely fabricated. He says the battle over Marcos's burial has divided the nation. Many older Filipinos do recall Marcos fondly: a petition supporting his reburial garnered 1.1m signatures. But that is small beer in a country of 100m where the median age is 23 or so: most Filipinos do not remember Marcos's regime at all.

Mr Duterte may spy a political opportunity. He comes from the southern island of Mindanao, and is the first president who is not part of the elite of Manila. His victory owes as much to voters' disenchantment with the dozen or so families that dominate Philippine politics

as it does to his tough-talking image. But winning as an outsider is a lot easier than governing as one, and the Marcos family remains powerful. Imelda serves in the House of Representatives; Imee, their daughter, is governor of the province of Ilocos Norte; her brother, Ferdinand junior, universally known as “Bong-bong”, is a swaggering senator who came within a few thousand votes of the vice-presidency. Appeasing the family gives Mr Duterte a political boost in Ilocos and a favour to call in when he needs it.

Mr Duterte's plan is not universally popular. A coalition of Jesuit groups said that interring Marcos in the heroes' cemetery “buries human dignity by legitimising the massive violations of human and civil rights...that took place under his regime”. Opponents tried to get the supreme court to block the burial, arguing that the law reserves the cemetery for those “worthy of admiration”. This week, however, the court approved the burial and urged the country to “move on”. But to many, as one strongman buries another, the Philippines appears to be moving backward, not forward.



Butcher in a box

▶ that voters support him because they are looking for someone with a plan, even if they disagree with bits of it.

In short, Mr Abe is in a uniquely powerful position for a Japanese prime minister. How he intends to use that power remains a bit of a mystery, however. He has been much bolder, politically, about pushing his ideas on security and international relations than he has about more urgent chal-

lenges such as Japan's shrinking population and idling economy. His labour-market and immigration reforms have been timid. He recently abandoned a plan to remove a tax credit that discourages married women from working full-time, which pushes them into insecure part-time work. It would be a shame to accumulate so much authority, only to squander it on less-than-pressing causes. ■

Civilians v soldiers in Pakistan

General consternation

ISLAMABAD

Nawaz Sharif has clawed back precious little power from the army

DIPLOMATS call it Pakistan's forthcoming “transition of power”. They don't mean a change of government, but rather the appointment of a new army chief. The incumbent, Raheel Sharif (pictured on the next page), is due to retire on November 29th. What would be a humdrum appointment in most other countries is a rare moment when the civilian government has the whip hand over Pakistan's overbearing army. The institution that dictates the country's policies on defence, foreign affairs and, to a large extent, internal security is not used to awaiting decisions by politicians. Yet the prime minister, Nawaz Sharif (no relation to Raheel) will have his pick, probably from one of four senior generals.

For the army, the prime minister is a dubious figure. He swept into office in an electoral landslide in 2013, determined to reduce the army's clout. His previous two stints in power had both been cut short by the army: in 1993, when it demanded new elections, and in 1999, when the army chief of the day, Pervez Musharraf, took power in a coup. Mr Sharif also wanted to befriend India, a country most military folk regard as Pakistan's eternal enemy but which the businessman in Mr Sharif sees as an obvious trading partner.

Mr Sharif has sparred with the army throughout his tenure. A month after his election he took the bold step of ordering Mr Musharraf to be tried for treason. In 2014, when Geotv, part of a broadly pro-government media empire, accused a branch of the army of attempting to assassinate its most famous journalist, Mr Sharif rushed to the injured man's bedside. For a year Mr Sharif resisted pressure from General Sharif to launch an operation to seize back control of North Waziristan, a tribal region completely overrun by gun-toting Islamists.

Yet all these spats ended with a surrender from Mr Sharif. An excuse was eventually found to let Mr Musharraf skip the country; Geotv was taken off air for a spell and the army went ahead with its North Waziristan campaign. Operation Zarb-e-Azb, as it was called, led to a fall in terrorism and helped turn General Sharif into the most popular army chief in history.

The latest bust-up followed the leak of details of a meeting in October between the generals and the government, amid a flare-up on the Indian border following incursions by militants from Pakistan. The resulting front-page story claimed that the ▶▶



No mere prime minister

▶ country's spy chief, General Rizwan Akhtar, was told to stop protecting armed groups who use Pakistan as a base for assaults in Afghanistan and India. The long-standing policy was leading to Pakistan's international isolation, said the civilians quoted in the report in the *Dawn*, the country's most reputable paper. Mr Sharif's staff was assumed to have leaked the story.

The army denied the allegations but also declared the story a "breach of national security". The generals have refused to attend further security meetings in the prime minister's office until the matter is cleared up, officials say. In a panicked response, the government first banned the journalist responsible from leaving the country, only to backtrack amid an international outcry. On October 29th the information minister, Pervaiz Rasheed, resigned—although he denied being the source of the story. A leak inquiry continues, and most observers believe the army won't be satisfied until more heads roll.

Mr Sharif will continue to defy the army where he can. He has not yielded to its demand for formal powers to conduct counter-terrorist operations in Punjab, Mr Sharif's home province and political base. The paramilitary Rangers, however, were unleashed on Karachi's criminal gangs in 2013 and later started targeting corrupt politicians as well.

The next army chief will probably stick to General Sharif's policies of cracking down on domestic militants and seeking to constrain the civilian government's room for manoeuvre. General Sharif has insisted that he does not want an extension of his term. Some of the prime minister's allies doubt that. The last time an army chief retired after serving out the specified three-year term was two decades ago. The precedent set by making sure General Sharif steps down as scheduled would be a small step in the right direction. ■

Wildlife conservation

Grim pickings

HO CHI MINH CITY

Vietnam's crackdown on traffickers of endangered species is only superficial

AN ENORMOUS turtle hangs as a good-luck charm from the wall of a traditional medicine shop in a Chinese part of Ho Chi Minh City, Vietnam's commercial hub. Traders who line both sides of the street, tending shops filled with fungi and fragrant bark, insist that they have no such ornaments for sale. One youth says he has heard a neighbour might have stocks of tiger glue, a tonic supposedly made from boiling up big cats. But he warns that the rancid gloop is very pricey—and also probably fake.

Vietnam's ruling Communist Party looks increasingly embarrassed by the country's reputation as one of Asia's worst wildlife-trafficking hubs. On November 17th and 18th it will advertise its efforts to quash the industry at an international wildlife conference in Hanoi, the capital, which will be attended by representatives from about 40 countries. But while the sale of exotic animal parts in Vietnam's big cities is gradually growing less blatant, it may not be getting rarer: the trade still flourishes, online and underground.

Vietnam's unsavoury appetites include ivory, pangolin, bear bile and tiger parts. But it is its taste for rhino horn that has lately caused the most consternation abroad. Rising demand from Vietnamese traders is widely blamed for a vast increase in the number of rhinos killed annually in South Africa, which shot up from only about a dozen in 2007 to 1,175 last year.

A lot of the horns entering Vietnam are sold to Chinese visitors, or smuggled into China in bulk (controls are looser at the

land border than at Chinese air- and seaports). But they are also consumed by rich Vietnamese, at least some of whom believe that drinking powdered horn can help treat ailments including cancer. Rhino horns are often given to bosses and business partners. Hosts sometimes grind them up at parties to flaunt their wealth.

Distributing grisly pictures of animal carcasses does not much dampen demand, reckons Madelon Willemssen of TRAFFIC, a charity. She thinks such images might even add to rhino horn's exotic appeal. Wildlife campaigners have instead focused on convincing Vietnamese businessmen that brown-nosing peers with expensive gifts is unnecessary and unimpressive. One particularly effective message, notes a local activist, has been to remind Vietnamese that rhino horns are made of the same stuff as human nails and hair.

The Vietnamese government promises action, on this and similar scourges. In October border guards seized at least four shipments of ivory, horn and other illicit wildlife products, an unusually large haul (cynics wonder whether their vigilance will cool after this month's conference). A new penal code which is supposed to come into force next year could be a big step forward: it introduces criminal penalties for wildlife offences which until now have been punishable only with fines.

Yet campaigners warn that tougher sentencing will make no difference if police keep failing to drag offenders before the courts. On November 14th the Wildlife Justice Commission, a charity, plans to release more details of an investigation into wildlife trafficking at a village not far from Hanoi. It says it saw more than \$50m-worth of illegal products for sale there, including 579 rhino horns. The charity handed its findings to the Vietnamese government in January, but is still waiting to hear whether charges will be brought against the dealers involved. It is about time the state joined the hunt. ■



There's a lot of demand for this in Vietnam

Pollution in India

Worse than Beijing

DELHI

Politicians bicker as the capital chokes

DELHI-WALLAHS expect a spike in pollution during the autumn festival of Diwali, which is famed for its exuberant fireworks. This year the city's bad-air index did indeed shoot up during the night-time revelry. But then, as winds died, the air chilled, smoke from the burning of rice stubble in surrounding farmland drifted in and the city's thick traffic resumed, the index failed to go down again.

Delhi's annual average measure of PM_{2.5}, a fine dust that is the most toxic component of its pollution, stands at 122 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$), about double Beijing's annual average. On Diwali and ten succeeding days this year, Delhi's air was clogged with averages of well over $500\mu\text{g}/\text{m}^3$, with peaks of up to $1,000\mu\text{g}/\text{m}^3$. The World Health Organisation (WHO) says the "safe" PM_{2.5} level is a mere $25\mu\text{g}/\text{m}^3$ over 24 hours.

Like miners drilling underground

With the city's 20m sneezing inhabitants complaining of sore eyes, itchy throats, headaches and fatigue, one trade association estimated that 5-10% of employees across Delhi were calling in sick. Dense fog caused pile-ups on roads. A sudden surge in sales created queues outside shops selling face masks and air purifiers. Arvind Kejriwal, chief minister of the National Capital Territory, which contains most of the sprawling city, likened it to living in a gas chamber. Edward Avol, an American scientist who has studied the effects of vehicle exhaust on children, says that Delhi's pollution is at "an occupational level of exposure", meaning that it is as bad as that experienced by, say, miners using power tools in a closed space.

On November 6th the national and local governments sprang into belated action, closing schools and construction sites, sprinkling water on the streets to dampen dust and tightening controls on vehicle emissions. Both India's supreme court and a national green tribunal, created to address environmental issues, weighed in with orders for more government action, including the implementation of a staged plan to deal more promptly with such spikes in pollution.

India's capital is ostensibly run by Mr Kejriwal and his Aam Aadmi Party, a populist opposition group that trounced rivals in elections in 2015. But as Mr Kejriwal has discovered, his "government" exercises minimal clout. It does not have the same

authority as those of India's states and it is locked in a bitter test of wills with the national government, led by Narendra Modi, the prime minister. The national government in effect controls Delhi's police and the municipal corporations that run city districts. It also appoints the city's governor, who wields hefty powers of oversight over Mr Kejriwal's administration.

The city government's attempt earlier this year to impose an odd-even scheme to curb traffic proved popular with commuters, but failed to reduce pollution much, leading Mr Kejriwal's opponents to dismiss it as a stunt. The chief minister contends that most of Delhi's smog comes from agricultural burn-off. The implication is that the governments of the surrounding states, one of which is run by Mr Modi's Bharatiya Janata party, are to blame for failing to stop the fires. But one minister in Mr Modi's government insists that 80% of Delhi's smog is home-produced, and another has declared that the real problem is "political pollution".

For farmers in northern India there are few affordable alternatives to burning the prickly stubble left after harvesting rice. For decades, governments have shied away from stopping the annual burn-off for fear of alienating farmers. An outdated dread of food shortages also prompted them to encourage rice growing, by offering floor prices and subsidies, in preference to other crops.

The nastiest part of Delhi's toxic cocktail, however, is probably the particulate

matter spewed out by diesel engines, which the WHO deems carcinogenic. Here again, successive Indian governments have made things worse. Keen to keep voters such as commercial drivers and tractor- and pump-addicted farmers happy, they instructed state-owned fuel companies to sell diesel more cheaply than gasoline. This promoted a massive switch to diesel engines. Indian carmakers, riding behind such European promoters of "clean diesel" as Volkswagen, ploughed millions into new diesel-engine factories. In 2013 more than half the new cars sold in India were diesel-powered.

The authorities have not been entirely useless. A past government helpfully ordered that most of Delhi's taxis and buses be converted to run on cleaner natural gas. Mr Modi's government earlier this year announced a speeding-up of new emissions standards; by 2020 new cars must have much cleaner engines, and will be run on far cleaner fuel. And although diesel in India remains cheaper than petrol, the difference has narrowed enough to shrink diesel vehicles' share of the market. But for the next few years, at least, residents of Delhi will be paying the price of previous policies with their health.

Just how high that price is, no one really knows. A study published in Delhi in 2008 estimated that 40% of residents had damaged lungs. Along with a range of other ill effects from pollution, they were five times more likely to suffer from chronic lung disease than other Indians, and four times more likely to have hypertension. More rigorous studies in other countries have shown marked increases in respiratory problems, cardiovascular disease and cancer tied directly to pollution levels, as well as serious and permanent damage to the health of children. Frighteningly, notes Mr Avol, those results were based on levels of pollution that are only one-fifth to one-tenth of what Delhi lives with. ■



Not good for you

Banyan | Prophets of piffle

Fortune-tellers are harmless, until politicians start listening to them



AT A time of political crisis in South Korea, spare a thought for all the upstanding shamans, sorcerers, soothsayers, diviners, astrologers, numerologists, necromancers and fortune-tellers around Asia who risk being tarred by events. For years the president, Park Geun-hye, appears to have been in thrall to a family friend and informal adviser, Choi Soon-sil, in ways that have scandalised South Koreans and brought Ms Park's presidency close to collapse. Ms Choi is said to have ruled on everything from Ms Park's cabinet appointments, to policy towards North Korea, to the display of magic silk purses at her presidential inauguration. She is now under arrest on suspicion of influence-peddling and embezzlement. The South Korean press describes her as a shaman, a figure with Rasputin-like powers of control.

The seeds of Ms Choi's influence go back to 1974, when a North Korean sympathiser murdered Ms Park's mother while trying to assassinate her father, the dictator Park Chung-hee. Soon afterwards Ms Choi's father, Choi Tae-min, the founder of a cult called the Church of Eternal Life, convinced the young Ms Park that he could contact her dead mother. Later American diplomatic reports say the late Choi controlled Ms Park "body and soul" during her formative years. Some control seems to have passed to his daughter. Yet that is not what professional, modern shamanism is all about, insists the head of Shaman Korea, a trade body. "Calling Choi Soon-sil a shaman is a disgrace," he thunders.

The existence of such an outfit is a reminder of how pervasive soothsayers and their like are in Asia. True, those close to Western leaders have at times also turned to fortune-tellers—think of Nancy Reagan's astrologer or Cherie Blair's New-Age guru, who set great store by the healing power of crystals. Yet even for the West, the fount of astrology lies in the East. And in Asia the occult is not just the preserve of an Indian minister learning that she will be president one day, or a crown prince in Thailand keen to know the most auspicious date to succeed his late father as king: it is baked into daily life.

On Seoul's streets, soothsayers' tents are everywhere, with fortunes told through face-reading, palm-reading, tarot cards and *saju*—predictions based on the "four pillars": month, day, year and time of birth. Hyeon-seo Lee, a defector and author, describes how common fortune-tellers are in North Korea. Though

the trade is supposedly illegal, and hiring a fortune-teller is punishable by three years' re-education, senior officials send their Mercedes-Benzes to the back streets to pick favoured ones up for a consultation. Even while on the run in China, Ms Lee says, defectors consult fortune-tellers about when they should change their names to keep ahead of North Korean and Chinese goons.

In Thailand it is often hard to separate state Buddhism from soothsaying. Astrologers determine the timing of many official actions, such as the unveiling of a draft constitution earlier this year. And in Hong Kong, the fortune-tellers at the Temple Street night market throw in for free whether it's a good day for a flutter on the horses. A *feng shui* master recently visited the Hong Kong offices of *The Economist* (our mission: to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress"). He left behind, in one corner, old coins for prosperity, a hidden mirror to ward off evil spirits and a picture of a dragon to enjoy the view of the harbour and invite good fortune in.

There is as little harm in a flutter on the stars as there is on the horses. And, as the late Tiziano Terzani wrote in "A Fortune-Teller Told Me", an account of a year spent with Asian clairvoyants: "Rain is a possibility, the umbrella a precaution. Why tempt fate if fate itself gives you a sign, a hint?" For many, prophecies are events in themselves, and shape subsequent developments.

But the problems multiply when prophecy meets power. Zhou Yongkang was China's hardline head of state security until 2012. He then became the most powerful Communist ever to be convicted of corruption. He had chosen the wrong soothsayer: his *qigong* teacher, known as the "Sage of Xinjiang", not only failed to predict his impending downfall but testified against him. China's elites are partial to *qigong* masters, even though the Communist Party is ever on the lookout for cults, such as Falun Gong, that might threaten it. It takes a cult to know one.

In Sri Lanka, Mahinda Rajapaksa's relationship with an astrologer soured when the astrologer failed to predict the strongman's surprise defeat in a snap election last year—even Nostradamus made the odd error, he said later, in his defence. (The next president promised a much more reasoned rule than the grasping, capricious Rajapaksa years—and then promptly took his oath of office at the auspiciously ordained hour of 6.21pm.)

A crack in the mirror

No astrological obsession had a more baleful effect than that of Ne Win, the longtime dictator of Burma (now Myanmar). In 1985, on a numerological whim, he introduced 75-kyat notes, to mark his 75th birthday. Two years later he withdrew various high denomination notes and replaced them with 45- and 90-kyat ones. He chose those denominations because both numbers are divisible by nine, and their digits add up to nine—Ne Win's lucky number. As his soothsayers should have told him, the huge currency confiscation impoverished millions, leading, in 1988, to an uprising against the brutal junta and his eventual ouster. When his soothsayer warned of an assassination attempt, he shot his image in the mirror. This, at least, seems to have worked: he eventually died in his sleep.

Note the downfall of all these leaders. Perhaps a Gresham's law of divination is at work, whereby the bad advice of soothsayers always chases out sounder counsel from more rational advisers. Indeed, the poor advice of soothsayers may chase Ms Park out of office. But that's only a prophecy. ■



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Democracy

China holds elections

BEIJING

But only the way the party likes them

THERE was a time when optimists saw a glimmer of a chance for the development of democracy under Communist Party rule in China. A good way forward, they suggested, would be a simple one requiring no change in the rules. All that would be needed to kick-start the process would be genuine competition in elections for local legislators. In 1980, at the start of Deng Xiaoping's "reform and opening" campaign, it almost seemed possible: grassroots elections across China saw their first lively campaigning since the party came to power. University students openly challenged the party itself. China's president, Xi Jinping, is determined not to let that happen again.

This year 900m voters in China are being cajoled into voting in elections of the same type that (briefly) aroused such enthusiasm under Deng. By the end of the year they will have chosen 2.5m representatives to sit in local "people's congresses". These form the lowest rung of the country's legislative ladder, and are the only ones that are filled through direct elections. Membership of higher-level congresses is decided by lower-level ones. On November 15th it will be the turn of the capital, Beijing, to go through the motions. How different the mood will be from those heady days 36 years ago.

People's congresses at all levels remain, as they were then, rubber stamps. Since 1980, however, the party has flirted on and

off with the idea of tolerating more competition (normally, the only candidates are those chosen in secret by party officials). Those feisty students were quickly silenced, but in subsequent elections there were usually a few independent candidates who tried to get on the ballot; a handful got elected. A high point was in 2003 when more than 100 independents campaigned. Some official media reported on this approvingly. With the rapid growth of the middle class, democratic awareness appeared to be stirring. But the party was nervous. In elections in 2006 and 2011 it cracked down on such attempts. This year's are the first of their kind since Mr Xi took over as China's leader four years ago. The authorities are on their guard.

Power to the party

Wang Xiuzhen, a 72-year-old living in Xinyuanli, a neighbourhood in north-eastern Beijing, says officials admitted to her that, according to the rules, she is allowed to stand if she receives nominations from ten voters. But they refused to give her the forms she would need to prove such support. They urged her to drop her bid and avoid bringing trouble upon herself.

Ms Wang, who also tried unsuccessfully to get on the ballot in 2011, says she wants to stand for election "to be a bridge between people like me, at the lowest levels of society who have no money and no power" and those who wield clout. "In

China it is only powerful people like enterprise leaders or school directors who become representatives," she laments. A retired factory worker, she is one of 18 people in Beijing who have publicly declared their intention to stand as independents. None is known to have got on the official lists.

It is the same in other parts of China. Wu Lijuan, a laid-off bank worker in Qianjiang, a city in the central province of Hubei, says she spent more than six months studying election law. This year she is trying for the first time to register as a candidate, aiming to improve public awareness of the local-election system. A divorcee, she lives apart from her children. She hopes this will help protect them from the repercussions of her political activities.

Hubei is also the home of Yao Lifa, one of China's most outspoken advocates of grassroots democracy. Mr Yao managed not only to register but even to win a seat in 1998—only to lose it five years later in what he said was a rigged process. Since then he has continued to act as a gadfly, educating others and encouraging them to run, among them Ms Wu. For his efforts, Mr Yao was briefly detained last year. He guardedly tells a foreign reporter that he is "not free these days and can't speak on the phone". But recently he, along with 57 other would-be independents, issued a public declaration. Electing "wicked" people would lead to "wicked acts" by officials, they said. "We can no longer play dumb, and pretend to be naive."

Much of the government's propaganda relating to this year's polls focuses on the need to avoid corruption. A small number try to get seats to promote democracy, but far more attempt to buy them in order to rub shoulders and do deals with rich and powerful legislators. Graft permeates every tier of the people's-congress system. In September 45 legislators were booted out ►►

► of the national parliament (membership: roughly 3,000) for “vote-buying and bribery”. They had been chosen by the provincial congress of Liaoning in the north-east, from which 523 delegates—nearly 85% of the total—were disbarred for involvement in the fraud. Official media described its scale as “historically unprecedented”.

Fighting corruption and crushing dissent have been hallmarks of Mr Xi’s rule. At the beginning of it, some had hoped that he might turn out to be a bit more liberal than his predecessor, Hu Jintao. It quickly became clear that political reform was not on his agenda. “Absolute power leads to absolute corruption, and thus unsuper-

vised power is extremely dangerous,” said Mr Xi’s anti-graft chief, Wang Qishan, in an article published on November 8th in the party’s mouthpiece, *People’s Daily*. But neither he nor Mr Xi has shown any inclination to give people’s congresses more freedom to hold the party to account.

The rhetoric was not always so grim. In 1987 Deng said direct elections could be introduced gradually at higher levels of the system, leading after “half a century” to general elections for the country’s leadership. Nearly thirty of those years have already passed, however. There is no sign that Deng’s vision has even begun to be implemented. ■

Separatism in Hong Kong

Umbrellas out

HONG KONG

The central government intervenes in Hong Kong’s oath-taking row

“IF YOU don’t deal with the two cancer cells, you will harm the entire body,” said Zhang Xiaoming, a Chinese official. He was justifying his government’s decision to block two lawmakers who support greater autonomy for Hong Kong from taking their seats in the territory’s Legislative Council, or Legco. The disease China fears is separatism; as if in confirmation of it, thousands of protesters took to the streets in Hong Kong just before the announcement, some shouting “Hong Kong independence!” Many in the territory resent the Communist Party’s supposed cure.

The intervention by the National People’s Congress (NPC), as China’s parliament is known, is the first of its kind since Britain handed Hong Kong back to China in 1997. The NPC has ruled before on constitutional matters in Hong Kong, but never before has it done so while judicial pro-

ceedings are under way in the territory on the same issue. On November 3rd a court in Hong Kong began hearing a case filed by the local government aimed at barring the two, Sixtus Leung and Yau Wai-ching, from Legco. Rather than wait for a verdict, China decided to step in right away.

Leaders in Beijing were enraged when the two referred to China in a derogatory way and displayed a banner saying “Hong Kong is not China” while they were being sworn in on October 12th. A commentary in the Communist Party’s mouthpiece, the *People’s Daily*, warned that the central government would “absolutely not take a laissez-faire attitude and cause calamity by letting the pustule fester”. The NPC’s ruling says that oaths must be taken “accurately, completely and solemnly” to be valid—no retakes allowed for violators.

The ruling could affect several other

lawmakers as well as Mr Leung and Ms Yau. A Chinese government lawyer in Hong Kong said 15 of them had used the same swearing-in ceremony for the 70-member body as an “opportunity for performance”. Pro-government legislators are demanding investigations. First in their sights is Lau Siu-lai, who paused for six seconds between each word while taking her oath and later explained that she had been trying to nullify its meaning (she passed muster with her second delivery).

Hong Kong’s chief executive, Leung Chun-ying, caused yet more disquiet when he told reporters that the rise of pro-independence activism could require the enactment of a new law on internal security. Article 23 of Hong Kong’s post-colonial constitution, known as the Basic Law, says the government should pass such a bill. But huge protests broke out in 2003 when it tried to do so, prompting the authorities to shelve their plans.

There could be more unrest if they try again. The demonstration just before the NPC’s announcement was a symptom of widespread public anger over perceived interference by the central government in Hong Kong’s affairs. Police used pepper spray to try to disperse the crowd (see picture). Demonstrators unfurled umbrellas to defend themselves, mimicking their use in 2014 during the “Umbrella Movement” when protesters paralysed commercial districts with weeks of sit-ins. It was that movement, and China’s refusal to grant its participants’ demands for full democracy, that led to the birth of independence-leaning groups such as Youngspiration, to which Mr Leung and Ms Yau belong.

Many Hong Kongers have little sympathy with the pair’s behaviour during their oath-taking (their pronunciation of the word “China” in a way used by Japanese in imperial days caused much offence). But they worry about what they see as the NPC’s attack on Hong Kong’s judicial independence. On November 8th hundreds of lawyers dressed in black marched in silent protest from the High Court, where the government’s case against the two is being heard, to the Court of Final Appeal. Among them was Martin Lee, a former legislator and doyen of Hong Kong’s democrats.

As a result of the NPC’s ruling, it is highly unlikely that the High Court will allow Mr Leung and Ms Yau to take their oaths again. Their attempts to do so have caused stormy scenes in Legco, where pro-establishment legislators have a (gerrymandered) majority. On November 2nd six security personnel were taken to hospital as a result of mêlées. Although the pair’s position is still ambiguous, Legco’s president has now barred them from entering the chamber. But that has not stopped the chaos: a session on November 9th was suspended after just four minutes when legislators tried to prevent security guards from ►►



It’s raining pepper spray

► evicting a colleague for trying to ask why Legco could not debate the NPC's decision.

It is hardly likely that barring the pair from the legislature will silence demands for greater autonomy for Hong Kong. Independence-leaning politicians like Mr Leung and Ms Yau won about 20% of the vote in Legco elections in September, a remarkable result for a cause that barely existed until 2014. Many people worry that China may use its campaign against them as a pretext to settle other scores, even with pro-democracy politicians who believe Hong Kong should be part of China. Some of the legislators accused of inadequate oath-taking are democrats of this kind. The more legislators who are ejected, the more by-elections will need to be held. There is a risk they may turn into referendums on Hong Kong's relations with China. What China sees as Hong Kong's disease is likely to get worse. ■

Cyber-regulation

The noose tightens

SHANGHAI

Alarm over a new cyber-security law

“THIS is a step backwards for innovation in China that won't do much to improve security.” Those damning words from James Zimmerman, chairman of the American Chamber of Commerce in China, describe his view of a sweeping new cyber-security law adopted on November 7th. Many foreign businesspeople agree with his dim assessment.

Though ostensibly designed to strengthen local networks against malicious hackers, in fact the bill looks very much like a techno-nationalist Trojan horse. The law affects both domestic and foreign firms operating on the Chinese mainland and covers a wide range of activity relating to use of the internet and information and communications technologies (ICT). It will not come into force until June next year, so it is not yet clear how the rules will be implemented.

Even so, several of them seem problematic. First, the government wants firms operating in “critical” areas to store inside China any personal information or important data that they gather in-country. But the law's definition of critical is absurdly expansive. It includes ICT services, energy, transport, water resources, finance and e-government.

This is a headache for multinationals, which typically rely on cross-border flows of business data. Firms worry that the law will not only require expensive new investments but also increase the risk of data

Lou Jiwei

A little local difficulty

BEIJING

A reformist finance minister retires. He will not be missed in the provinces

IN MOST countries the finance minister is the second most important person in government. Not in China. Economic policy is set by the Communist Party's leaders and does not change just because there is a new minister. Hence the retirement of one of China's few remaining economic reformers, Lou Jiwei, caused barely a ripple on the currency markets. Nevertheless, his removal and track record say a lot about the real problems of governing China.

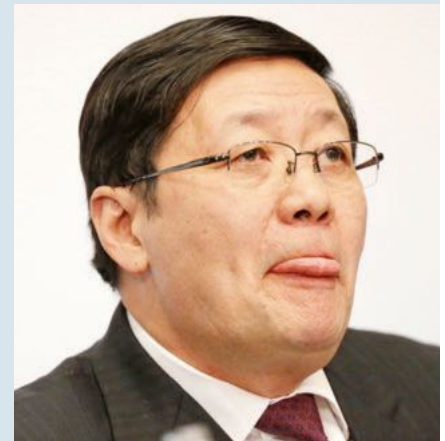
Mr Lou is a protégé of Zhu Rongji, a reformist prime minister who stepped down in 2003. He is an unabashed free marketeer—a rare, even endangered species in China. His replacement has been widely interpreted as yet another example of infighting at the top, in which attempts to place loyal supporters of the president, Xi Jinping, in positions of authority risk sidelining reformers.

But that seems unlikely. Mr Lou's successor, Xiao Jie, comes out of the stable not of Mr Xi but of his prime minister, Li Keqiang (Mr Xiao held a senior post in Mr Li's secretariat). So if any politicking is being done, it is by the prime minister. Moreover, Mr Xiao is no statist. He worked in the finance ministry for years and is reputed to be a reformer. So while there are plenty of signs of drift in economic policy, Mr Lou's departure is not one of them. The most obvious explanation is that he has reached the mandatory retirement age for ministers of 65.

That said, his record casts light on one of the most important reasons for politicking at the top: Mr Xi's determination to impose his policies and priorities on thousands of nose-thumbing local offi-

cials. Over the past two decades, local governments have been responsible for more and more of China's total government spending, but depend on transfers from the central government (not local taxes) to do it. This has led to local profligacy and lack of fiscal control. Mr Lou came to office in 2013 promising to change the system and restructure local government debt. He failed on both counts: local government spending as a share of the total has risen from about 65% in 2001 to about 85% in 2015, transfers from the centre have widened, and local governments' borrowing has increased.

Mr Xi recently had himself named “the core” by his party's Central Committee, in part to signal to local officials that he has the weight of the whole party behind him. He is engaged in the same struggle that Mr Lou waged, against the vast inertia of local officialdom.



If only they had listened to him

theft. Another thorny provision requires companies to get security certifications for important network equipment and software. Foreign firms fear this might be used to force them to turn over security keys and proprietary technologies, which could be passed on to state-owned rivals.

Michael Clauss, Germany's ambassador to China, worries that “security rules might be used to pursue other aims” such as industrial policy favouring Chinese companies. He is not the only one. Chinese media note with enthusiasm that provisions requiring the use of internet products and services that are “secure and trusted” (whatever that means) are likely to favour Chinese hardware firms like Lenovo and Huawei and local cloud-computing providers such as Alibaba and Tencent.

Ironically, the overweening law may end up doing the opposite of what is intended. Because threats to networks are increasingly transnational, taking a bunker mentality could make it harder for China to prevent attacks. Mark Austen, head of the Asia Securities Industry and Financial Markets Association, believes the new rules are flawed because they do not encourage cross-border co-operation.

If Chinese officials reject such talk as the mere bleating of foreigners, they should at least listen to Eric Xu. More than a year ago he warned: “If we're not open, if we don't bring in the world's best technology, we'll never have true information security.” That eloquent rejection of techno-nationalism came from a man who is co-chief executive of Huawei. ■



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Election 2016

How it happened

WASHINGTON, DC

Donald Trump won fewer votes than Mitt Romney in 2012. But Hillary Clinton did much worse than Barack Obama

DONALD TRUMP'S road to the White House, which he completed with his stunning victory over Hillary Clinton on November 8th, began on an escalator at Trump Tower in Manhattan 17 months ago. Descending at a stately pace to the foyer, where a crowd of bemused journalists awaited him, the reality-television star was lampooned as a false prophet on a conveyor belt. What followed struck many pundits as even more ridiculous. "Our country is in serious trouble," he said. "We used to have victories, but we don't have them. When was the last time anybody saw us beating, let's say, China in a trade deal? They kill us. I beat China all the time."

It seemed like a bad joke. Mr Trump was a billionaire property developer who surveyed the world from the 26th floor of a Manhattan skyscraper he built: America hadn't done him too badly. Moreover, his zero-sum view of diplomacy and protectionism were, at best, marginal positions in the party whose nomination he sought. Many also noted that Mr Trump, a political gadfly who is on his third party, had until recently espoused different views, including on immigration, which he announced as the cornerstone of his campaign.

After Mitt Romney lost the 2012 presidential election, Mr Trump seemed to berate "the Republicans", as he still calls his

party colleagues, for failing to back immigration reform. But in Trump Tower he raged against Mexican immigrants whom he called "rapists." It was hard to recall a presidential contender making such bigoted remarks since the civil-rights era. Many commentators gawped, fascinated, then dismissed his chances.

But what the pundits decried—his contempt for conservative orthodoxy, his dystopian vision, bigotry, anti-intellectualism and egomania—now looks like a fully formed, stunningly successful campaign which, if it has not rewritten the rules of electioneering, got away with flouting most of them. Mr Trump raised less money than Mrs Clinton, built less campaign infrastructure, had few thought-out policies and was endorsed by almost no newspaper and none of his predecessors as Republican nominee, except Bob Dole. And instead of restraining his intemperance, as his advisers often told him to, he let it rip.

Unqualified success

He backed torture, a border ban on Muslims, murdering the families of suspected terrorists and using nuclear arms as a tactical weapon. He denigrated women, Muslims and blacks, performed a mocking impression of a disabled journalist, incited his crowds to beat up protesters, and was

heard, on a videotape aired a month before the election, boasting of his ability to grab women by the genitals. There is an interesting dispute about what role the media, hungry for the conflict Mr Trump stirred, played in his rise. But Americans heard these things unfiltered—and even many of Mr Trump's supporters disapproved of them. Exit polls suggest 61% of voters considered him unqualified to be president and only 34% said he had the right personality and temperament. Yet almost 60m Americans, including many of those doubters, voted to make him president. How did this happen?

Chance and the complacency of others played a part. For most of the Republican primaries, Mr Trump profited from a crowded field. While his 17 opponents, including solid conservatives such as Governor John Kasich and Senator Marco Rubio, fragmented the vote, he built a steady lead among disaffected voters, especially blue-collar workers who shared his pessimism and hostility to immigrants and free trade. It was not until the 36th state up for grabs, his own New York, that Mr Trump won a majority; and that the increasingly horrified Republican leadership gave much thought to stopping him. Having bagged the nomination nonetheless, he enjoyed other advantages. After eight tough years, of a Democratic government blighted by slow wage growth and, for most of that time, political deadlock imposed by a Republican Congress, voters wanted change. Only 31% say America is on the "right track". The gravity-defying popularity of Barack Obama—whose 52% approval rating makes him more popular than Ronald Reagan at the end of his second term—had seemed to soften that anti-incumbency ►►

kick. Yet Hillary Clinton, despite some dazzling last-ditch campaigning by Mr Obama and his even more popular wife, Michelle, could not reap the benefit of it.

An establishment figure in a time of anti-establishment rage, the Democratic nominee was another gift to Mr Trump. Her strengths include deep understanding of the political system, acquired over three decades in or close to power, and a flair for policy; but most voters consider the system corrupt and, thundering for change, her vision of progress by inches inadequate. She was crippled by her weaknesses, including an inability to enthuse and a much-exaggerated reputation for deceitfulness, which an unending controversy over her e-mail arrangements as secretary of state exacerbated. Had Mrs Clinton roused Mr Obama's coalition of non-whites, the young and well-educated she would have won. In Philadelphia, where she held a pre-election rally on November 7th, at which her husband Bill, Mr and Mrs Obama and Bruce Springsteen all performed, she won 28,000 fewer votes than Mr Obama in 2012. That was close to her margin of defeat in Pennsylvania, a state where she had led in 107 of the 125 most recent polls and which last went red in 1988. Following Mr Trump's victories in Florida and North Carolina, this made his victory look probable.

Clinton's curse

In almost every group, Mrs Clinton underperformed her predecessor. She won non-whites and young voters by 74 and 55 percentage points respectively, around ten points less than Mr Obama had. Her saviours were predicted to be the two groups most insulted by her rival, Hispanics and women. Yet she won only 65% of the first and 54% of the second, six points and a

point less than Mr Obama managed. College-educated women, who backed her in recent polls by 2:1, ended up favouring her by just six percentage points.

A more appealing Democrat could have beaten Mr Trump. But it is not clear who that might have been; Bernie Sanders, Mrs Clinton's much-loved socialist rival in the primaries, and Joe Biden, the vice-president, are not as formidable as bruised Democrats now imagine them to be. After eight years in power, their party looks denuded of top-level talent. This was especially evident in the Senate races, for which it put up too many has-beens, like Governor Ted Strickland in Ohio and Governor Evan Bayh in Indiana, and greenhorns such as Katie McGinty in Pennsylvania, all of whom lost.

The stronger Republican slate had consistently outpolled Mr Trump, but he probably ended up helping it, especially in Wisconsin, which he turned red for the first time since 1984, helping Senator Ron Johnson to a surprise victory. Despite having 24 senators up for re-election, the Republicans lost only two seats, leaving them with a thin majority. More predictably, they also maintained their previously thumping majority in the House of Representatives. The Democrats needed a net gain of 30 seats to overturn it, and picked up eight. Under Mr Trump, who has promised to kick off his presidency by appointing a conservative to the Supreme Court and dismantling much of Mr Obama's legacy, America will have a unified government for the first time since the beginning of Obama's first term.

Despite his advantages, he was also responsible for that, for there was a method in his approach. Mr Trump's erstwhile pragmatic remarks on immigration suggest he was at least familiar with the prevailing

view that, to regain power in an increasingly diverse society his party needed to expand its appeal beyond whites. Yet his chauvinism and miserabilism pointed, from the start, to the opposite conclusion: that by stirring up a racially infused white nationalist sentiment, which a combination of economic and cultural grievances had spawned, turned a losing coalition into a winning one.

Most likely, this was intuitive, a quality Mr Trump praises in his decision-making. Though born rich, he seemed genuinely attuned to those grievances. Asked, in an interview with *The Economist* during the primaries, how this was possible, he said: "You know my father was a builder in Brooklyn and Queens, predominately. And I worked with subcontractors... somehow even though I live on Fifth Avenue and all of these things, I very much relate to those people."

Berned then burned

He was being too modest. Mr Trump won big among whites without a college degree. They made up a third of the electorate, and backed him over Mrs Clinton by 39 points. But at Mr Trump's hate-charged rallies, at which his supporters yelled "Burn her at the stake" of Mrs Clinton and "Kill Obama", middle-income white professionals were easy to find; 49% of college-educated whites voted for him, only slightly fewer than had backed Mitt Romney.

Though some votes are yet to be counted, overall Mr Trump won 1m fewer than Mr Romney, and ended up trailing Mrs Clinton—who for her part won 6m fewer than Mr Obama—in the popular vote. He beat her, by 279 to 228 votes in the electoral college, because his strength with white, working-class voters was sufficient to flip Michigan, Pennsylvania and Wisconsin, all of which Mrs Clinton had been expected to win easily. It was close, with Mr Trump's combined advantage in that trio a little over 100,000 votes. Perhaps the damage Mrs Clinton suffered from an ill-judged intervention from the FBI's director, James Comey—eleven days before the poll he raised a fresh suspicion about her e-mails, which he then tried to allay a week later—accounted for some of those votes, which, combined with winning the popular vote, will feed Democrats' sense of grievance.

Mr Trump's victory has left a country shocked and ravaged by discord, especially along racial lines. This goes far beyond the usual partisanship. Half of America can scarcely believe the other half has chosen Mr Trump. At his celebrations in New York, the Republican victor struck a gracious note: "Now it's time for America to bind the wounds of division." In the background, one of his supporters meanwhile hollered: "Kill Obama". His presidency will be defined by how he reconciles those competing instincts. ■



Great expectations

The Trump administration

What to expect

JANESVILLE, WISCONSIN

Something between Reaganism and France's National Front, probably

AMERICA is about to take a hard right turn. All that is in doubt is whether the final destination is one that Ronald Reagan might have saluted—a country of low taxes, light regulation and free markets, in which individuals and businesses are free to seek prosperity with a minimum of government involvement—or a more nationalist, populist and even statist place, with questions of law, order, identity and cultur-

al tradition playing a role that demagogic European politicians might both recognise and applaud.

In their hearts many Republican leaders in Congress prefer something closer to the first vision. But on the morning after election day the party's keeper of the Reaganite flame, the Speaker of the House of Representatives, Paul Ryan, stepped to a podium in his hometown of Janesville, Wisconsin, and pledged fealty to Donald Trump. Mr Ryan, a free-trader and fiscal conservative who had rebuked Mr Trump several times during the campaign, credited the president-elect with securing a mandate for his version of government. He thanked Mr Trump for providing electoral coat-tails long enough to create the first unified Republican government in Washington since 2007.

But if Mr Ryan and his fellow congressional leaders are to survive this new order, they will have to embrace some unfamiliar positions. Mr Trump won office by challenging Republican orthodoxy on trade barriers (he likes them, though they alarm big business), spending (the president-elect sees no pressing need to reform Social Security payments to the old), relations with Russia's president Vladimir Putin (Mr Trump is a fan) and immigration. Trump supporters are sure they have been promised that government agents will round up and expel millions of foreigners without the right papers, possibly including hundreds of thousands of youngsters brought to the country as children and shielded from deportation by executive orders signed by Barack Obama. They also expect a wall on the border with Mexico, ▶▶

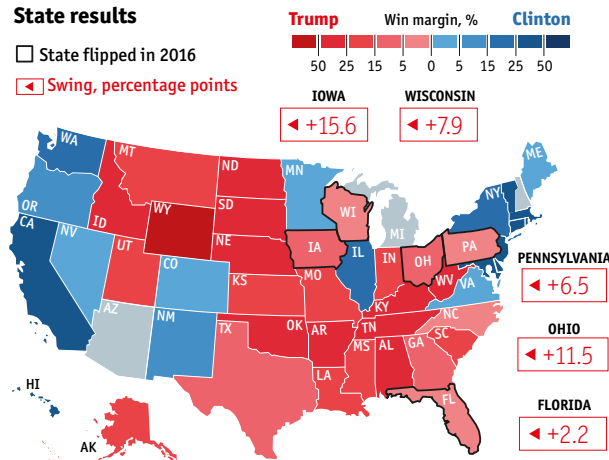
Red November

US presidential election results 2016, at 11:00 November 10th

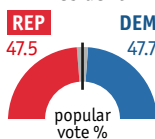
State results

□ State flipped in 2016

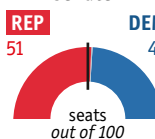
◀ Swing, percentage points



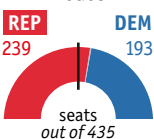
President



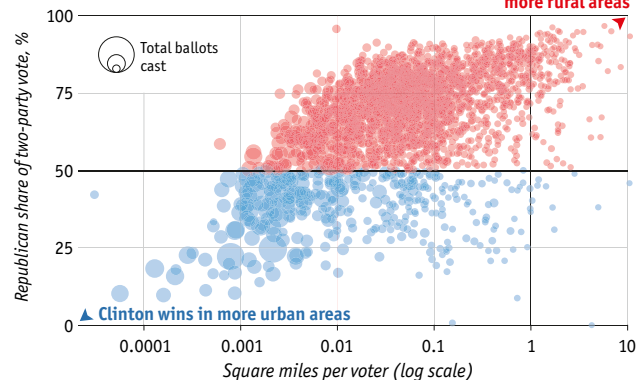
Senate



House

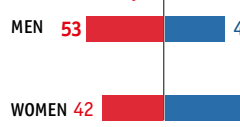


Population density and vote share, by county

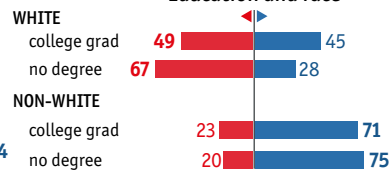


Vote share

Exit polls, %



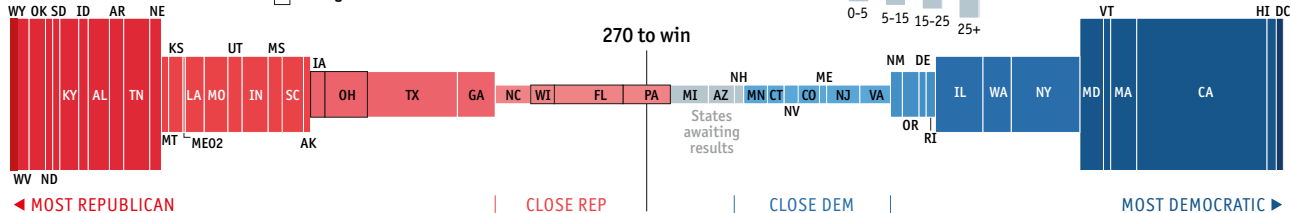
Education and race



279 Trump

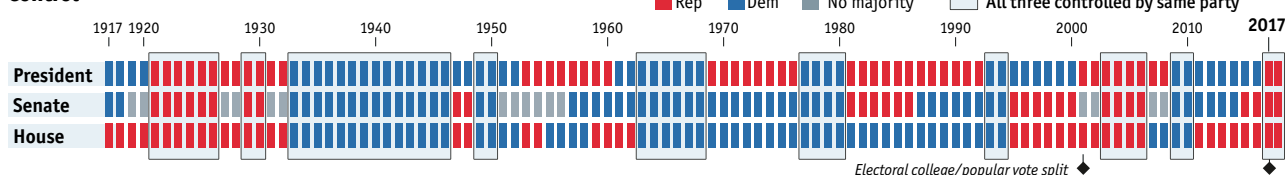
Electoral college count

□ Changed hands since 2012



Clinton 228

Control



Sources: AP; Atlas of US Presidential Elections; Census Bureau; CNN; Library of Congress; The Economist

▶ and something tangible will probably have to be built to stem a voter-revolt—though Congress may balk at spending the vast sums needed for the fortifications Mr Trump has described.

Many in the party are now eager to show that it can synthesise long-held conservative principles with Mr Trump's worldview. Mr Ryan talked of freeing ordinary workers from the Obamacare health law. Signalling an all-out assault on the environmental rules and schemes that Mr Obama had hoped would be a big part of his legacy, Mr Ryan spoke of reining in oppressive federal officials to save the livelihoods of coal miners, farmers and ranchers who use public lands in Western states. Yet Senator Mitch McConnell, the Republican leader in the Senate, moved quickly after the election to quash Mr Trump's promises to impose term limits on members of Congress as part of a plan to change the culture in Washington.

Optimistic Republicans predict that Mr Trump will be a sort of CEO-president, setting grand strategy while delegating day-to-day governance to Congress and to his vice-president, Mike Pence, a sternly conventional Christian and fiscal conservative who served in the House of Representatives before becoming governor of Indiana. They describe Mr Trump as a boss who disdains policy memos in favour of face-to-face briefings, and is more fussed by what works and what resonates with his base of working-class voters than with the niceties of ideology. Republicans certainly have a chance to shape America as they will. Mr Trump will get to appoint at least one justice to the Supreme Court, and in the country at large will enjoy support from 34 Republican governors. Overall the party of Mr Obama is weaker than it has been in generations, and faces still more losses in 2018, when the Senate map strongly favours Republicans.

Expect conservative action in every field of domestic policy. Obamacare will be an early target for dismantling, says Senator John Barrasso of Wyoming, a surgeon by background and a member of the Senate leadership. Several colleagues credit the unpopularity of the health law with securing their re-election this week, Mr Barrasso says. Republicans do not need to present a 2,000-page replacement bill on the Senate floor, he explains—Mr Trump can do a lot to dismember the law by appointing a new Health and Human Services Secretary who relaxes the many rules and mandates in the act, as Congress prepares alternatives that use tax credits, savings accounts and greater competition to provide cheaper, if less comprehensive health cover. With tens of millions of Americans covered by Obamacare, Republicans will look to states to step in and take the lead role currently played by the federal government, though Democrats predict millions



Get to work, Mike

will still fall through the gaps.

Congressional bosses and Trump advisers predict swift moves to expand production of American gas, oil and coal, whether by building new pipelines (including the long-delayed Keystone XL pipeline from Canada), easing exports of natural gas or opening public lands to new drilling and mining. Environmental agencies and the Department of the Interior will be staffed with pro-business executives, says a senior Trump adviser, following the dictum that "personnel is policy."

Change of climate

Business leaders tipped for such posts as energy secretary or interior secretary include Harold Hamm, an Oklahoma oilman, and Forrest Lucas, the founder of an energy-services firm. Campaign advisers have told Mr Trump—who has called climate change a hoax—that domestic energy output could be increased by \$150bn a year, and have urged him to swiftly withdraw from climate change commitments made by Mr Obama. They predict that a new conservative majority in the Supreme Court will doom the Clean Power Plan, an Obama-era scheme to limit coal's use in electricity generation, and kill rules that increased federal oversight over waterways. President Trump probably has the legal power to withdraw from the Paris Agreement on climate change, ratified by America this year, though it might take time. Expect lawsuits from Democratic-run states, demanding more federal action to curb greenhouse gases as pollutants.

A senior economic adviser suggests that Mr Trump could achieve sweeping tax cuts within his first 100 days. Trimming corporate tax rates may be politically easier than reforming taxation on individuals, in-

cluding popular tax breaks on mortgage interest. A Trump administration may offer big firms an amnesty if they repatriate profits held overseas, spending some of the proceeds on big new infrastructure schemes, though in the Senate Mr McConnell has suggested infrastructure is not a high priority.

Mr Trump's populist rhetoric may not stop him appointing Steven Mnuchin, a former Goldman Sachs banker and finance director of the Trump campaign as his Treasury secretary. Other big jobs are expected to be offered to Republicans who came out early for the president-elect, such as Senator Jeff Sessions of Alabama, an anti-immigration hardliner and close adviser, and a former mayor of New York (and campaign attack dog), Rudy Giuliani. Representative Tom Price of Georgia is spoken of as a possible budget chief in the White House, while contenders for secretary of state include a former House speaker, Newt Gingrich, Senator Bob Corker of Tennessee and Governor Chris Christie of New Jersey (who is also talked of as attorney-general, but reportedly thinks the job insufficiently grand). National-security posts are likely to go to such advisers as Lieut-General Michael Flynn, a fiery Obama-critic and former head of the Defence Intelligence Agency, and another retired three-star general, Keith Kellogg.

During the campaign foreign-policy grandees from prior Republican administrations were among Mr Trump's harshest critics, shuddering at his geopolitical views. Now they must decide whether to help a new president with no experience in public office. Stephen Hadley, a national security adviser in George W. Bush's White House who refrained from comment on Mr Trump, is tipped to be one of them. ■

Trump and the economy

Strap up

WASHINGTON, DC

Congress can constrain only parts of Donald Trump's economic policy

MARKET reaction to Donald Trump's win has been something between sanguine and elated. But if you set out to design policies to do long-term harm to the economy, you might end up with something resembling Mr Trump's agenda. The next president threatens to erect trade barriers, which would disrupt supply chains and dampen productivity growth. He wants to deport many of America's 11m illegal immigrants, which could reduce the size of the labour force by up to 5%. And his tax plan is ruinously expensive, costing almost \$7trn over a decade, or around half of America's outstanding national debt.

How much damage is President Trump actually likely to do? That depends first on how much of his policy he can get enacted. Until recently, his tax cuts would have been vulnerable to a Democratic filibuster in the Senate. But thanks to a rule change in the latest budget deal, the Republicans can now pass even unfunded tax cuts with only a simple majority, explains Richard Kogan of the Centre on Budget and Policy Priorities, a think-tank. (To do so, they must include sunset clauses, as George W. Bush did when he cut taxes in 2001.)

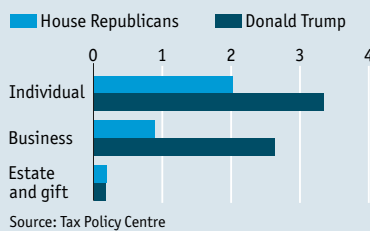
Congressional Republicans might moderate Mr Trump's plan. The tax cuts Paul Ryan, Speaker of the House of Representatives, wants are expensive, but much less so than Mr Trump's (see chart). The corporate tax may end up at Mr Ryan's proposed 20% rather than Mr Trump's desired 15%. Mr Trump's costly promise to offer the same rate to sole traders may not survive. Both men agree that there should be three tax rates for individuals (12%, 25% and 33%), but there will be debate over the generosity of deductions.

Debt would rise significantly even under Mr Ryan's plan. More borrowing will give the economy a boost in the short term. Mr Ryan's tax cuts would be much bigger than Barack Obama's fiscal stimulus in 2009. Add in the infrastructure spending Mr Trump also wants, and the economy could get much hotter, which helps to explain the rally in financial markets on November 9th. The question is to what extent this will jeopardise America's long-term fiscal health.

While Congress might rewrite the Trump tax plan, it has much less power to restrain Mr Trump's protectionism. Existing laws allow the president to impose tariffs in very broadly defined circumstances, as Mr Trump gleefully noted

Opening gambits

US tax-cut plans, cumulative cost 2016-26 forecast \$trn



during the campaign. He could use the president's prerogative over foreign affairs to withdraw from the North American Free Trade Agreement with just six months' notice, according to the Peterson Institute, a think-tank.

Mr Trump has said that he is merely threatening to tear up trade agreements and impose tariffs, in order to achieve better trade deals. The goal of such new deals, according to his advisers, will be to eliminate the trade deficit. That is all but unachievable. The trade deficit is the result of low national saving, which will fall still further if the government borrows more. And no one knows how other countries will react to Mr Trump's threats.

Monetary policy is another cause for worry. Mr Trump has railed against low interest rates, saying they had stoked an economic bubble (a sentiment repeated by one of his advisers, to the *Financial Times* on November 9th). He also claimed that Janet Yellen, chairman of the Federal Reserve, was acting in an "obviously political" manner and "should be ashamed of herself". This caused speculation that Ms Yellen might resign after a Trump victory. That seems unlikely; Fed chairmen have withstood presidential criticism before. But Ms Yellen will surely depart when her term expires in February 2018.

Who might Mr Trump nominate to replace her? In an interview before the election Stephen Moore, an economic adviser to Mr Trump, floated several names, including Larry Kudlow, a television pundit, Art Laffer, a private-sector economist, and Martin Feldstein, an academic, all of whom served in the Reagan administration. Most conservative economists like Mr Feldstein have been calling for tighter monetary policy for years; Mr Kudlow is an exception. If Mr Trump's nominee is to reflect Republicans' hawkishness, the expectation of higher interest rates will hang over the economy, though that may have bigger implications for economies outside America (see page 59).

With a big fiscal stimulus, though, higher rates might be needed to keep inflation down. That would send the dollar higher, hurting American manufacturers and increasing the lure of protectionism. That is where the biggest threat to growth lies. ■

Polling and prediction

Epic fail

NEW YORK

How a mid-sized error led to a rash of bad forecasts

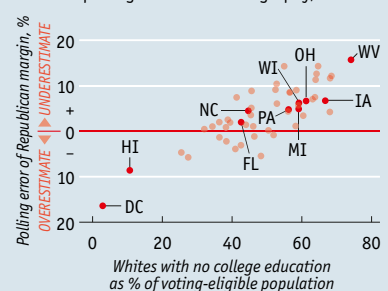
AS POLLING errors go, this year's misfire was not particularly large—at least in the national surveys. Mrs Clinton is expected to win the popular vote by a bit over one percentage point once all the ballots are counted, two points short of her projection. That represents a better prediction than in 2012, when Barack Obama beat his polls by three. But America does not choose its president by popular vote, and three of Donald Trump's bigger outperformances occurred in states around the Great Lakes that proved decisive. Mrs Clinton led the polls in Wisconsin by five points, and in Michigan and Pennsylvania by four; Mr Trump is projected to claim them all, albeit by narrow margins. He did even better in Ohio, where he turned a two-point poll lead into an 8.5-point romp, and Iowa, where a three-point edge became a 9.5-point blowout.

While pollsters correctly gauged the sentiment of most slices of the electorate, they underestimated Mr Trump's appeal to working-class whites. Although it was clear that he would run up the score with these voters, he managed to exceed even pollsters' rosy expectations for him: projected to win them by 30 points, the national exit poll showed him winning by 39, a larger edge than Mrs Clinton's among Latinos. The share of a state's electorate represented by whites lacking a college degree was an almost perfect predictor of how he did relative to polling (see chart).

It is possible that "shy Trump" voters didn't want to admit their support to pollsters. However, there was no evidence of such a pattern during the Republican primaries, when Mr Trump did not generally beat his polls. And given his margin with working-class whites, it is hard to imagine ►

Where the votes were

US state polling errors and demography, 2016



Sources: Atlas of US Presidential Elections; Census Bureau; FiveThirtyEight; The Economist

▶ that people whose friends and neighbours mainly backed him would be ashamed to say so themselves. A likelier cause is “non-response bias”—that working-class whites who backed Mr Trump were particularly reluctant to answer the phone. It is also possible that some decided to vote Republican after the last polls were completed. Lastly, Mr Trump’s blunt, targeted courtship of this demographic group, which historically has shown a fairly low propensity to vote, may have motivated them to turn out in greater numbers. Such enthusiasm is hard for pollsters to detect.

Whatever the cause, this miss was within the range of reasonable expectations, given that the margin of error is magnified when dealing with demographic subgroups. The key question for forecasters was how a mid-sized polling mistake led them to get the election so wrong. For models based on state polls, the core issue was

how well an error in one state was likely to foreshadow one in the same direction elsewhere—and if so, where. Mr Trump’s six-point outperformance in Wisconsin had little bearing on his performance in Colorado, but spelled doom for Mrs Clinton in nearby Michigan, Ohio and Pennsylvania. Prediction models that either used weaker or less precisely targeted correlations between states were more bullish on her odds, and performed worse.

There is one family of forecasts that did better: those which ignore both polls and candidates and predict results based exclusively on structural factors like economic performance and incumbency. This approach suggested all along that the 2016 campaign was likely to be an extremely tight race. Yet because these models seemed unsophisticated, and because Mr Trump’s campaign was so unusual, they were largely overlooked. ■

The Democrats

Destiny derailed

ATLANTA

Hillary Clinton’s demoralised party faces some hard choices

A WEEK ago, demography was destiny for the Democrats. Along with many Republicans, they assumed—perhaps complacently—that swelling minority populations and left-leaning younger voters would form a winning electoral block, soon even an indomitable one. Instead they lost not only the White House but several governorships, their gains in Congress only piffingly compensating for the attrition they have suffered, from the Senate to state houses, during Barack Obama’s presidency. In Kentucky’s house of representatives they lost their last legislative chamber in the South, a region in which their demographic hopes were strongest, but which instead remains a Republican bulwark.

The autopsy will be as rancorous as the fallout among Republicans would have been had Hillary Clinton won. For her party’s populist faction, the result confirms that she was a centrist throwback, a milk-sop out of touch with the public mood. For its centrists, some of the blame belongs to the left-wingers and their grouching. After the recriminations, this internecine row will focus on three linked issues.

First, strategy. For some, the debacle proves that the coalition on which Mrs Clinton relied—built around college-educated liberals, millennials and minorities—was insufficient and will be for a while, not least since Republican legislatures will persist in their gerrymandering and voter-suppression efforts. Thus the party must

reconvert some of the white, blue-collar voters in the Rust Belt who clinched the White House for Donald Trump. Another reading is that it must emulate Mr Trump’s approach, by maximising turnout in existing constituencies. The poor Democratic showing in multiracial Milwaukee and Detroit, which helps to explain Mrs Clinton’s defeats in Wisconsin and Michigan, sup-



All hat and no president

ports that analysis.

The corollary of this dispute is policy. Democrats, like other vanquished centre-left parties in the West, must decide if beating their opponents means joining them, or whether, morally and practically, they can’t. For some Mrs Clinton’s renunciation of the Trans-Pacific Partnership represented an insufficient disavowal of free-trade; they also regarded Mrs Clinton’s foreign-policy stance as too hawkish. The trouble is that Mr Trump has cornered the market in protectionism and isolationism. And even if the Democrats conclude that disenfranchised voters want a more activist government—a dubious proposition—Mr Trump’s vows to protect Social-Security spending (public pensions) would complicate a bid to expand their base with more largesse. A tougher line on immigration, meanwhile, risks alienating the Hispanic voters they will continue to need.

Add to this the conundrum of Mr Obama’s legacy. The oddity in this rout is that the president himself is still popular: his approval rating rivals Ronald Reagan’s at the end of his second term. Yet his main reforms, above all the health-care expansion that was a party priority for decades, are set to be dismantled. The fact that low-income white voters are, numerically, Obamacare’s principal beneficiaries has failed to offset its technical glitches, market frictions and Republican attacks. Likewise many of Mr Obama’s environmental directives, cherished by mainstream Democrats but loathed in Appalachia and elsewhere, now look doomed.

Finally, there is the question of leadership. The deficit of options that, along with her heft and cash, helped to ensure Mrs Clinton’s nomination has not been rectified; on the contrary. Kamala Harris of California is a promising addition to the Senate, but otherwise the roster of senior talent is still thin. It includes Cory Booker, a senator from New Jersey, and Elizabeth Warren of Massachusetts, who stands to inherit the anti-establishment mantle from Bernie Sanders. Quite apart from her views, however—and shamefully tragic as it is to acknowledge—after the witch-burning atmosphere of Mr Trump’s rallies, it would be risky to adopt another female candidate in short order. The Democrats’ main talent reservoir is in big-city mayoralities, but those politicians often specialise in the sort of coalition of businessmen and minorities that flopped for Mrs Clinton.

The leadership chatter seems premature, but isn’t. If he implements a fraction of his ideas, or governs as he campaigned, Mr Trump’s presidency will be a disaster. The Democrats would have a golden chance to oust him in four years—with a plausible figurehead. “This is painful,” Mrs Clinton said on the morning after, “and it will be for a long time.” How long depends on the response. ■

Lexington | The people v the people

Setting Americans against each other paved Donald Trump's path to power



ON ELECTION day in America it is usually a comfort to spend hours talking to voters emerging from polling places. After months of interviews with partisans at campaign rallies, regular citizens are reassuringly unzealous, and willing to volunteer that neither party has a monopoly on wisdom. Not this year. In 2016 too many Americans sounded sour, unhappy and quick to dismiss as illegitimate or immoral those who disagree with them.

Lexington spent November 8th in southern Wisconsin, talking to voters in small towns known for an unflashy, church-picnic and chambers-of-commerce sort of conservatism. This is Paul Ryan country—the home turf of the Republican Speaker of the House of Representatives, a beaky ideologue and devout Catholic who several times clashed with Donald Trump during his presidential campaign, publicly rebuking the businessman for his boorish ways (Mr Ryan called Trumpian slurs against a Mexican-American judge a “textbook case of racism”).

Reporting from polling stations in Elkhorn and Janesville was dispiriting and revealing. Republicans who had just cast ballots for Mr Trump and Mr Ryan expressed contempt not just for Hillary Clinton—“She should be impeached,” said many—but for the sort of Americans liable to vote for her. As a rule, ventured Shane Price, a shipping manager in Janesville, Democrats put their own interests over those of the country, while a big majority of Republicans are “red, white and blue”, and put America first. Pondering those sections of the electorate immune to Mr Trump’s charms, Mark Schweiner, a financial adviser from Elkhorn, lamented that the country is changing, with a growing proportion of residents who lack a vested interest in America’s future and merely “want handouts”. To greatly broaden its attractiveness the Republican Party might have to appeal to such free-riders, he conceded, yet he would rather it did not, for that would mean compromising on its small government, low-tax principles.

Trump voters encountered in Wisconsin were fully aware that their presidential pick is a polarising figure. Several said that he had not been their first choice to be the Republican nominee—and indeed back in April Mr Trump lost the Wisconsin presidential primary to Senator Ted Cruz of Texas, a social conservative. They called Mr Trump “blunt” and “very bold”. They cast his rudeness as a form of candour, and proof that he is not a career

politician. Several chided Mr Ryan for rebuking Mr Trump, seeing their congressman’s criticisms as evidence that he is just another mealy-mouthed, calculating elitist, who has seemingly forgotten that in the real world “everybody makes mistakes”. Put another way, when the much-loathed press or Democrats attacked Mr Trump, that reassured his voters that they shared common foes.

That points to another reason to fear Mr Trump’s populist victory. For populism involves more than policies that are at once simple and stirring enough to shout at a rally (“Build That Wall”) or print on a bumper sticker. Populism is also the politics of Them and Us, involving appeals to tribal identities, and zero-sum contests over hard-pressed resources. Populism is hardly new. What makes Mr Trump’s win different is that he so explicitly sought to cast his opponents as illegitimate, unfit, contemptible, un-American or (a favourite word) “disgusting”—and was confident that he would find an echo among his voters.

Mr Trump was the nominee of a party which, after losing the presidential election of 2012, commissioned a post-mortem concluding that until Republicans built a new coalition, including more non-whites and other fast-growing demographic blocs, it would struggle to win national office again. Mr Trump’s gamble was to take an exactly opposite approach. He bet everything on a strategy of nostalgic nationalism, summed up in the slogan “Make America Great Again”, precisely because his hunch was that the country is home to an underestimated mass of voters who do not want to be part of any rainbow coalition, thank you—and certainly not if the price is granting amnesty to immigrants in the country without the right papers, or embracing gay marriage.

Nasty, not nice

Mr Trump was open about his plans, telling *The Economist* in interviews that he planned to appeal to a “silent majority” of “hard-working, great people in the United States that have been disenfranchised”. He ticked off areas in which he could beat Mrs Clinton: on border security and fears of crime caused by immigrants, on foreign trade and jobs and on Islamic terrorism (“She’s very, very weak”). Working Americans and their wives are “the biggest group of people in our society”, Mr Trump noted, explaining how he had learned to relate to such folk as a schoolboy spending summers on his father’s building sites, working with sheetrock fitters, carpenters and electricians. He boasted, correctly, that his focus on working-class voters would be rewarded with a “big crossover” from independents, Democrats and those who rarely vote. A pollster told him that his only weak point was when voters were asked about candidates being nice, Mr Trump confided in an interview in August 2015. “And I said, this is not going to be an election on niceness.”

Mr Trump may be unique in embracing nastiness as a way to demonstrate sincerity. But it is also the case that Mrs Clinton rallied such voter blocs as Latinos, blacks, women or gay Americans by telling them not just that she was on their side, but that her coalition would not seek to win the votes of those Americans they dislike or distrust. That is what it meant when she declared half of Mr Trump’s supporters “deplorables”: Mrs Clinton was promising that she had no intention of trying to persuade the wrong sort of voters. That politics worked in 2016 because so many Americans have moved beyond distrusting politicians, parties or Washington. Talking to voters in this horrible election year, it has become clear that they dislike one another. Now that divided republic is Mr Trump’s—if he can keep it. ■

Also in this section

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40 Bello: Peru's technocratic president



Donald Trump and Mexico

The wall that appals

MEXICO CITY

Mexico must somehow learn to cope with its new neighbour

FROM the moment Donald Trump announced his candidacy for the presidency of the United States in June 2015, the possibility of his victory has been a Mexican nightmare. He made clear from the start that he was running against Mexico as much as against his political foes. He called Mexicans “rapists” and threatened to deport 11m illegal immigrants (half of them Mexicans) and to rip up the North American Free-Trade Agreement (NAFTA). He promised repeatedly to make Mexico pay for a border wall that he would build, perhaps by taxing the remittances Mexican migrants send home.

When the nightmare unexpectedly came to pass on November 8th the mood on Mexico City's streets was subdued rather than enraged. “Tremble”, advised the front page of *Reforma*, one of the leading broadsheets, but few Mexicans seemed to be doing that. Instead, some took refuge in gallows humour: think of the jobs Mr Trump's wall will create, they joked. Others sounded hurt that their neighbours had chosen a leader who made such a point of slandering them. “I can't believe that there's racism in 2016,” said Andrew Abasolo, an events-company employee.

For Mexico's weak and unpopular president, Enrique Peña Nieto, who has two years left in office before he must step down, Mr Trump's victory is a trauma and, conceivably, an opportunity. Mexico's

well-being depends largely on its relations with the United States, with which it is deeply integrated through family ties and through NAFTA. It now falls to Mr Peña to defend vigorously his country's interests without provoking a rupture with the United States' president-elect. After a post-election phone call the two leaders agreed to “outline a new work agenda” on security and prosperity.

Whether that will be possible is unclear. No one yet knows how much of Mr Trump's anti-Mexican rhetoric was campaign bluster and how much expressed his fixed intent. For the two months until inauguration day and beyond, every speech and appointment by the new administra-

tion will be obsessively scrutinised south of the border. Before the vote Mexico's finance minister, José Antonio Meade, reassured Mexicans that the government had prepared for a Trump victory with contingency plans.

So far, they have not been needed. The peso, which has been vulnerable to each improvement in the political fortunes of Mr Trump, duly slumped upon his election (see chart). But the sell-off was not as bad as many analysts had feared. Some thought it would fall as low as 25 to the dollar. As *The Economist* went to press it was trading at 19.9. The central bank did not immediately raise interest rates, as some observers had thought possible.

The peril has not yet passed. Far from it. The weak peso has already pushed up the inflation rate (though it has also boosted the buying power of dollar remittances from Mexicans living in the United States). Next year inflation is expected to rise to the upper end of the central bank's target range of 2-4%. To keep it from going beyond that, and to forestall a further devaluation, the central bank might raise interest rates when it next meets on November 17th. Both the peso's weakness and higher rates threaten to depress consumer spending, the main factor sustaining Mexico's modest growth rate.

A bigger uncertainty looms over NAFTA, Mexico's trade deal with the United States and Canada, which buy more than 80% of the country's exports. Mr Trump has called the agreement “the worst trade deal in history” and promises either to renegotiate it or abrogate it. He has talked of slapping a tariff of 35% on Mexican exports to the United States. If he carries out this threat, “the Mexican economy would decelerate, possibly hard,” says Carlos Capistrán, an economist at Bank of ▶▶

In the dumps

Mexican peso against the \$, inverted scale

DONALD TRUMP:



Source: Thomson Reuters

▶ America Merrill Lynch.

He may not. The United States has not withdrawn from a trade agreement in 150 years. American businesses will lobby against pulling out of NAFTA, pointing out that 6m American jobs depend on trade with Mexico; to export to the United States, Mexican firms must import plenty of components from their neighbour.

But until Mr Trump makes his intentions clear, warns Andrew Stanners of Aberdeen Asset Management in London, investors will be cautious. That is likely to depress foreign investment, which reached 2.6% of GDP in 2015. Mexican investors will be wary, too. An investment lull, coupled with higher inflation and interest rates, could cause a recession.

The new American president has good reasons to avoid a complete breakdown in relations with Mexico. Its co-operation is vital in the fight against drug gangs and in controlling migration, two priorities of the immigrant-bashing, law-and-order-minded Mr Trump. Under the Mérida Initiative, American liaison officers, from the FBI, the Drug Enforcement Agency and other branches of government, enjoy extraordinary access to Mexican intelligence and security command centres, and operate with remarkable freedom and very little publicity across Mexico. If provoked or humiliated, the government could deport America's drug warriors.

Mr Peña will spend what had already promised to be a troubled final two years in office managing Mexico's relationship with Mr Trump's administration. Mr Peña was widely reviled when he invited Mr Trump to the presidential palace during the election campaign. He cannot now afford to appear submissive to the president-elect, but he cannot alienate him, either.

Mr Trump, too, faces a difficult balancing act between pandering to his Mexico-phobic base and getting along with the United States' most important neighbour. His election has ended a period of growing warmth between the two countries, but it may not open an era of naked hostility. "The sky won't fall," predicts David Shirk of the University of San Diego, "but it will be lower."

If relations with the United States go awry, anti-Trump feeling and economic damage could determine who will succeed Mr Peña in 2018. Polls had suggested that the National Action Party, a centre-right opposition party, had the best chance of nominating a successful candidate. But Mr Trump's chauvinism could provoke a nationalist backlash among Mexican voters. If so, the probable beneficiary is Andrés Manuel López Obrador, runner-up in the last two presidential elections. His ideology is far left, but his blunderbuss manner and penchant for simplistic answers to complicated problems make him sound a lot like Mr Trump. ■



Maple syrup crimes

Syrup and sin

OTTAWA

Mobsters take on Quebec's maple monopoly

EVERY spring schoolchildren in Quebec flock to *cabanes à sucre* (sugar shacks) in the woods to watch "sugarmakers" boil down the sap of maple trees into syrup and to sample sticky confections. But this sugary pastime has a sinister side, as Quebecers are now learning through a sensational criminal trial. The defendants are accused of stealing syrup worth C\$18.7m (\$14m) from the province's "strategic reserve", a caper that involved the use of throwaway "burner phones" and shoeboxes stuffed with cash. Maple syrup's circuitous journey from shack to flapjack, the trial has revealed, offers many opportunities for skulduggery, and even for violence.

Richard Vallières, one of the four defendants on trial in Trois-Rivières, admits that he acted as a "barrel roller", someone who helps producers find customers who are willing to pay more than the only legal buyer in the province, the Federation of Quebec Maple Syrup Producers. In 2011, he says, he was approached to carry out a much riskier crime: stealing from the federation itself. Prosecutors say a lorry-driver transported blue barrels full of syrup from the federation warehouse in St-Louis-de-Blandford to Mr Vallières, who drained them and refilled them with water, to be returned to storage. The illicit syrup was then sold in Ontario, New Brunswick and the United States. The thefts during 2011 and 2012 brought Mr Vallières a profit of close to C\$1m.

He claims that he acted under duress. An unnamed defendant, who will be tried separately, threatened to kill him, his girlfriend and his daughter unless he stole from the federation, Mr Vallières told the

court. "Anyone talks, he'll get a bullet in the head," warned his confederate when the two were held in the same cell after their arrests. Mr Vallières thinks he has connections with the Montreal mafia.

That account clashes with statements by the lorry-driver, Sébastien Jutras, who was convicted in a separate trial for his part in the pilferage of 3,000 tonnes of maple syrup. He suggested that the thieves felt entirely justified in ripping off the federation. In testimony before the court, Mr Jutras said the view of Mr Vallières's father (and co-defendant), Raymond, was that "stealing from thieves is not stealing." (Raymond Vallières denies this.)

The federation tries to smooth out the incomes of Quebec's 7,500 or so sugarmakers, who account for nearly three-quarters of world output, by setting production quotas and paying them a fixed price. During gluts, as this year, when production hit a record high, excess supply goes into the strategic reserve.

But some producers complain that the quotas are too low and that the cartel does not pay in full until stock is sold. Most of all, they resent the obligation to sell to the federation when producers in other provinces are free to market their maple syrup to anyone, often for higher prices. The federation now says it will raise quotas next year, but that is unlikely to satisfy disgruntled producers. They will continue to seek the services of barrel rollers. And criminals, as well as schoolchildren, will continue to frequent Quebec's sugar shacks. ■

Property in Venezuela

Maduro's boom

CARACAS

Companies are turning cash into concrete as fast as they can

LOOK skywards in posh districts of Caracas, the capital of South America's most economically troubled country, and you will see something surprising: construction cranes at work on rising office towers. Dozens are nearing completion during Venezuela's most severe recession ever. In the trendy Las Mercedes area, the din of pneumatic drills starts shortly after 7am every weekday.

About 400,000 square metres (4.3m square feet) of office and commercial space are under construction in the city. "That is a significant amount," says Carlos Alberto González Contreras, president of Venezuela's Real Estate Chamber. This is not a sign of optimism that Venezuela's authoritarian government is anywhere close to solving the colossal economic problems it has created. On the contrary, it is a desperate ▶

▶ stratagem for coping with them.

Companies based in Caracas have bank accounts full of fast-devaluing bolívares and few good options for spending them. Under Venezuela's convoluted system of currency controls, featuring two official exchange rates, it is nearly impossible to convert bolívares into dollars at an acceptable rate. Just using the cash to buy existing property usually won't work: such transactions are denominated (illegally) in dollars and settled outside the country. So putting up new towers is the way to go.

Labour is cheap. Venezuela's president, Nicolás Maduro, trumpets repeated in-

creases in the minimum wage (four so far this year) as evidence of the generosity of the "Bolivarian revolution", begun by his late predecessor, Hugo Chávez. However, the rises do not make up for inflation, which is running at an annual rate of 700%, according to the IMF. At the black-market rate for the bolívar, which has dropped 40% in the past month, construction workers earn about \$30 a month.

Figuring out which companies are financing construction is fiendishly difficult in secretive Caracas. They are said to include operators of mobile-phone networks, banks and pharmaceutical firms.

Pernod Ricard, a French drinks company, opened a swanky headquarters in Las Mercedes last August as a "reaffirmation of its commitment" to Venezuela, but it bought the building rather than constructing it.

Though Venezuela's nutty economy makes building projects rational, it does not make them easy. Materials are in short supply. Workplace theft is common.

The building boom is confined to Caracas. Residential construction by the private sector is "practically paralysed", Mr González Contreras says. In 2010, it built 90,000 homes in the country. He expects that to fall to just 5,000 this year. ■

Bello | The limits of technocratic government

Peru's refreshing new president lacks political know-how

THEY might not have realised it, but Peruvians got three presidents for the price of one when they narrowly voted for Pedro Pablo Kuczynski in an election in June. Over a long career, Mr Kuczynski has been an investment banker, a multinational business manager and a public servant. These identities have each been on display in his first 100 days in office.

The investment banker is a libertarian who wants to cut taxes. The business manager has shown energy and drive in trying to cut through red tape holding up infrastructure projects worth some \$19bn. The public servant has promised stronger democratic institutions and a "social revolution" in a country which, for all its recent progress, is still marked by poor public services that require higher tax revenues to fix. Seemingly missing in the new president is the political guile to reconcile these contradictions.

Mr Kuczynski is still enjoying a honeymoon. Coming after a lacklustre predecessor, Ollanta Humala, he is a refreshing change. He cracks bad jokes, is transparently decent and well intentioned, and he often speaks his mind. While other Latin American presidents have been pusillanimous, he has publicly condemned the "interruption in the democratic and constitutional order" in Venezuela, for example. Later this month he will host a score of heads of state, from China's Xi Jinping to Barack Obama, at an Asia-Pacific Economic Co-operation summit in Lima. Fluent in English, with a bulging international contacts book, Mr Kuczynski is likely to shine at the event.

Peruvians will judge him on his promise, at his inauguration, to create "a modern, more just, more equitable" country in his five-year term. That will be hard work. The Peru he inherited features public concern about corruption and rising



crime, and an economy whose slower underlying growth is flattered by two big new copper mines. Lacking a majority in congress, the government managed to extract from it power to issue laws by decree on these matters for three months.

With the fiscal deficit at 3.4% of GDP, Mr Kuczynski has dropped earlier plans to slash value-added and corporate taxes. Instead he will shave one point from value-added tax and trust in raising revenues by pressing informal businesses to register and pay taxes. That looks optimistic. The government aims to get investment growing again by boosting business confidence with a simplification of taxes and a revival of big projects, such as a second runway at Lima's congested airport, a metro line in the capital and a gas pipeline.

But rather than taxes, it is red tape and a dysfunctional state that hold back growth. For example, there is no sign that the government has found the political operatives needed to rescue mining projects stalled by local opposition. A demonstrator was killed last month near Las Bambas, a Chinese-owned copper mine, during a protest against the trucking of ore through villages.

The government has started to shake up the police force, and plans to create a new unit to tackle organised crime. Unexpectedly, Mr Kuczynski has been tripped up by scandal. Carlos Moreno, his former doctor, whom he appointed as a health-care adviser, was taped apparently encouraging the fraudulent diversion of patients from the public health service to a friend's private clinic (he denies wrongdoing). In response, the president promised to bar corrupt officials from public service for life; days later, he revealed that the government had consulted one who had been convicted of fraud.

These missteps have cut Mr Kuczynski's approval rating from the mid-60s to the high-50s. That matters. He only won the election because two other candidates were disqualified and because the campaign of Keiko Fujimori, his defeated opponent, was hit by a last-minute scandal. Since his party holds just 18 of the 130 seats in congress, he is dependent on public support to get things done.

Surprisingly, Mr Kuczynski chose a cabinet in his own image, with few experienced politicians. The result is that the government has wavered in its approach to Ms Fujimori's party, which has a majority in congress. It broadly agrees with Mr Kuczynski on the economy, but not on creating the strong, independent institutions Peru needs. The president did little to prevent congress from making controversial appointments to the ombudsman's office and the central bank board.

"It's a government with an identity crisis," says Alberto Vergara, a Peruvian political scientist at Sciences Po, a university in Paris. "They are modernising technocrats who suspect that the country needs more than that, but don't quite know what." When the honeymoon ends, that is likely to be a problem.

The
Economist

SPECIAL REPORT

ESPIONAGE

November 12th 2016

Shaken and stirred



Shaken and stirred

Intelligence services on both sides of the Atlantic have struggled to come to terms with new technology and a new mission. They are not done yet, writes Edward Carr

IN THE SPRING thaw of 1992 a KGB archivist called Vasili Mitrokhin walked into the British embassy in Riga. Stashed at the bottom of his bag, beneath some sausages, were copies of Soviet intelligence files that he had smuggled out of Russia. Before the year was out MI6, Britain's foreign-intelligence service, had spirited away Mitrokhin, his family and six large cases packed with KGB records which he had kept hidden in a milk churn and some old trunks under the floor of his dacha.

The pages of "The Mitrokhin Archive", eventually published in 1999, are steeped in vodka and betrayal. They tell the stories of notorious spies like Kim Philby, a British intelligence officer who defected to Russia in 1963. And they exposed agents like Melita Norwood, who had quietly worked for the KGB for 40 years from her home in south-east London, then shot to fame as a great-granny. Her unrelenting Marxist refusal to shop at Britain's capitalist supermarkets earned her the headline: "The Spy Who Came in from the Co-op".

Mitrokhin's record for the largest-ever haul of intelligence was smashed in 2013 when an American contractor, Edward Snowden, fled from Hawaii to Hong Kong with a secret archive of his own that contained more than 1.5m classified files from America's National Security Agency (NSA). Mr Snowden uncovered programmes with names like DISHFIRE and OPTIC NERVE under which the NSA and its British counterpart, GCHQ, were alleged to be monitoring phones and computers around the world. Mr Snowden's accusation was not that foreign agents

had infiltrated Western intelligence agencies but that Western agencies were spying on ordinary people, including their own citizens.

To look at Mitrokhin's meticulous typed-up transcriptions side by side with Mr Snowden's capacious pen-drives conveys a sense of how deeply and rapidly the business of intelligence has changed. Western intelligence agencies used to inhabit a parallel world where spy battled spy. Their trade was stealing or guarding secrets. Their masters were the men and women in government. Today the intelligence services are part of everyone's world. Their main task has been to protect society from terrorists and criminals. They are increasingly held to account in the press, parliaments and courts. This special report is about their struggle in the past 15 years to come to terms with this transition. They are not done yet.

Who can spy on the spies?

The intelligence revolution is partly the result of new technology. As recently as 1999, on becoming director of the NSA, Michael Hayden asked to send an e-mail to all staff. He was told: "We can't actually do that." The organisation used computers to break codes rather than to surf the web as everyone else did. The NSA's new facility in Bluffdale, Utah, the first of

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A list of sources is at Economist.com/specialreports

several, now stores exabytes of data drawn from everyday communications. At Britain's GCHQ, most code-breaking was done on paper until well into the 1980s. Today, inside its doughnut-shaped building in Cheltenham, south-west England, the hum from banks of computers that stretch away into the half-light is drowned out by the roar of air-conditioning.

The revolution has brought spying closer to ordinary people. After the attacks on America on September 11th 2001, counter-terrorism and counter-insurgency became the focus for the American intelligence agencies, says John Parachini, who heads intelligence policy for RAND, a think-tank. Almost two-thirds of today's intelligence personnel have been hired since 9/11. As the world has moved online, so the spooks have become involved in monitoring organised crime and paedophiles as well as terrorists. That might mean tracking a drugs syndicate from Latin America to Europe, or working out how criminal gangs launder their money, or following paedophiles on the web.

In Mitrokhin's days spies sent coded messages using short-wave radios and dead letter boxes. Now the communications of the spooks' new targets are mixed in with everyone else's, shuttling between computers and smartphones that are identical to those on your desk and in your pocket. Counter-terrorism, in particular, is pre-emptive. Hence the security services have had to act as hunters of conspiracies rather than gatherers of evidence.

I don't believe you any more

And the revolution is taking place amid growing popular suspicion of everyone in charge. The days are gone when the word of Congress, the home secretary and the odd judge commanded enough public confidence to see off the accusations of a private individual such as Mr Snowden. Belated official acknowledgment of secret programmes has often been met by public dismay, even after assurances that they have been properly overseen. "It is not enough for the authorities just to say 'trust us'," writes Paul Bernal, of Britain's University of East Anglia. "The public needs to know."

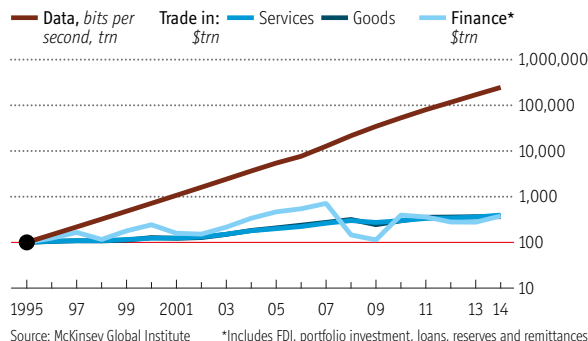
Privacy advocates complain that the spooks have unprecedented scope to pry into people's lives. They warn of a burgeoning surveillance state. The spooks retort that, on the contrary, they cannot keep up with terrorists and criminals cloaked by encryption, the dark web and the fact that, as the world builds internet infrastructure, a smaller share of total traffic is routed through accessible Western networks.

At the heart of the debate lies a conflict. The goal of a modern intelligence service, in the formulation of Sir David Omand, a former British intelligence chief, is for citizens to trust the state to manage the threats to their everyday lives. To maintain public safety, the intelligence services must be able to employ secret sources and methods that inevitably involve intrusion. Yet to command that public trust, they must also be transparent and prepared to live by rules that protect individual privacy.

These contradictions cannot be wished away. Privacy is a

SIGNIT's source

Global flows, 1995=100, log scale



precondition for intimacy, trust and individuality, says David Anderson, a senior lawyer asked by the British government to review intelligence legislation. It secures rights such as the freedom of assembly and fair trials. The knowledge that an all-seeing state is watching has a chilling effect even if you have done nothing wrong. Perhaps your words will be used against you later, under laws passed by a different government. Perhaps the state will try to crush the dissent that prefigures desirable social change—as America's FBI tried to destroy Martin Luther King by sending a letter, supposedly from a disillusioned admirer, that accused him of being a "colossal fraud and an evil, vicious one at that".

But privacy is not an unalloyed good. A society that gives it primacy over security invites paralysing disorder and injustice that would inhibit the very intimacy and freedom of expression which privacy is supposed to promote.

Likewise, although the public needs to know what is being done in its name, some spying techniques lose their potency if they are discovered. Early Enigma decrypts in 1940 from Bletchley Park, Britain's code-breaking centre, were given the "CX" prefix of MI6 reports so that the Nazis would think they were based on standard human intelligence (known in the jargon as HUMINT). A former CIA employee who is now at RAND tells how, after a successful raid in 1998, journalists learned that the NSA was intercepting calls from the satellite phone of Osama bin Laden, the founder of al-Qaeda. Immediately after the news got out, the phone fell silent.

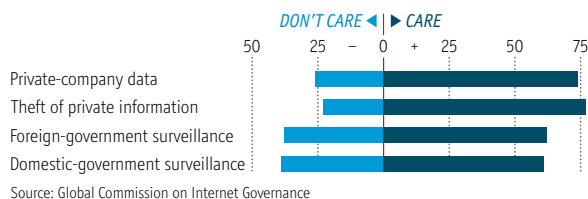
Since the Snowden revelations, Western security services, and particularly those of America and Britain, have come in for savage criticism. Much of this has focused on the intense years immediately after 9/11. The CIA subjected prisoners to brutal interrogation techniques, including simulated drowning, or waterboarding. For some years the NSA operated a telephone-surveillance programme without judicial oversight. That programme was later judged to be illegal.

This special report will look at those transgressions in greater detail. Yet, even taking them into account, the criticism of American and British intelligence is overblown. Rather than being James Bonds, real-life intelligence officers are bureaucrats. Rather than acting as freewheeling individualists, most set out to live by the rules. It is possible to argue about the merits of intercepting and warehousing data, about access to databases and large-scale hacking, but the idea that controlling masterminds at the NSA and GCHQ are plotting mass surveillance is a myth.

Such criticism is especially unfair when it comes from outside the English-speaking intelligence alliance embracing America, Australia, Britain, Canada and New Zealand, known as the Five Eyes. Few countries say much about their intelligence ser- ➤

So much for privacy

United States, share of respondents' views about online privacy, 2016, %



► vices or have a clear framework for governing them. Britain's operated almost entirely in the shadows until the 1990s and acknowledged some of its activities for the first time only in 2015. Yet by the end of this year it will have put its intelligence services under a system of oversight that is a model. And America is more open about its intelligence services than any other country.

The stark contrast is with countries like China and Russia, where the security services answer to nobody except the men at the very top. Russian and Chinese citizens are subject to untrammelled surveillance by their own leaders.

Before looking at Russia and China, and the growing awareness that they will become the Western agencies' main antagonists again, start with the twin shocks of technology and terrorism. They have turned the world of intelligence on its head. ■

Technology

Tinker, tailor, hacker, spy

Who is benefiting more from the cyberisation of intelligence, the spooks or their foes?

"THE COMPUTER WAS born to spy," says Gordon Corera, who covers intelligence for the BBC, Britain's national broadcaster. The earliest computers, including Colossus and SEAC, were used by signals intelligence (known as SIGINT) in Britain and America to help break codes. But computers also happen to have become supremely good at storing information. Searching a database is a lot easier than searching shelves of files like those compiled by the East German secret police, the Stasi—which stretched for 100km.

The job used to be to discover what a hostile country was up to by attaching crocodile clips to telephone lines emerging from its embassy, intercepting communications, collecting data and decrypting them. It was an industrial process. Breaking code was laborious, but once you had succeeded, the results endured.

"Twenty years ago we had a stable target, a stately pace of new technology and point-to-point communications," says a senior intelligence officer. Cryptography evolved slowly, so "when you cracked a code it could last from ten to 30 years."

The internet changed everything. Roughly \$3.4trn a year is being invested in networked computers, phones, infrastructure and software. The pace is set by businesses, not spooks. Individual packets of data no longer travel on a dedicated phone line but take the route that is most convenient at that instant, blurring the distinction between foreign and domestic communications. Signal intelligence used to be hard to get hold of. Today it gushes in torrents. The trick is to make sense of it.

Civil-liberties groups rightly claim that this new world presents untold opportunities for surveillance. This has been especially true for the NSA and GCHQ. Most of the traffic has passed through America, which contains much

of the infrastructure of the internet, and much of the rest passed through Britain, even if it originated and terminated elsewhere. Everyone uses the same hardware and software, so if you can break one device, you can break similar devices anywhere.

Knowing who communicates with whom is almost as revealing as what they say. In a technique called contact chaining, agencies use "seed" information—the telephone number or e-mail address of a known threat—as a "selector" to trace his contacts and his contacts' contacts. A burst of activity may signal an attack. In 2015 contact chaining let GCHQ identify a new terrorist cell that the police broke up hours before it struck.

You are never alone with a phone

Mobile phones show where they are. According to Bruce Schneier, a cyber-security expert, the NSA uses this information to find out when people's paths cross suspiciously often, which could indicate that they are meeting, even if they never speak on the line. The NSA traces American intelligence officers overseas and looks for phones that remain near them, possibly because they are being tailed. Location data can identify the owner of a disposable phone, known as a "burner", because it travels around with a known phone.

The technical possibilities for obtaining information are now endless. Because photographs embed location data, they provide a log of where people have been. Touch ID is proof that someone is in a particular place at a particular time. Software can recognise faces, gaits and vehicles' number plates. Commercially available devices can mimic mobile-phone base stations and intercept calls; more advanced models can alter texts, block calls or insert malware. In 2014 researchers reconstructed an audio signal from behind glass by measuring how sound waves were bouncing off a crisp packet. The plethora of wired devices in offices and houses, from smart meters to voice-activated controllers to the yet-to-be-useful intelligent refrigerator, all provide an "attack surface" for hacking—including by intelligence agencies. Britain's government has banned the Apple Watch from cabinet meetings, fearing that it might be vulnerable to Russian hackers.

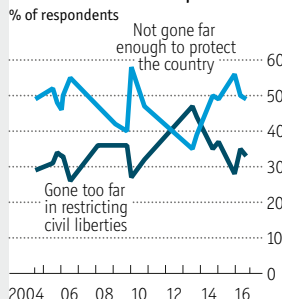
The agencies can also make use of the billows of "data exhaust" that people leave behind them as they go—including financial transactions, posts on social media and travel records. ►►



Getting the balance right

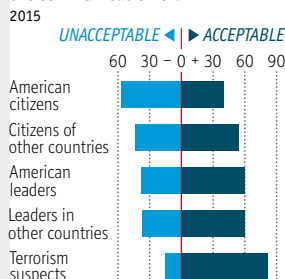
Americans' views...

...on US anti-terrorism policies



Source: Pew Research Centre

...on US government monitoring the communication of:



- Some of this is open-source intelligence (known as OSINT), which the former head of the Bin Laden unit of the CIA has said provides “90% of what you need to know”. Private data can be obtained by warrant. Data sets are especially powerful in combination. Facial-recognition software linked to criminal records, say, could alert the authorities to a drug deal.

The agencies not only do more, they also spend less. According to Mr Schneier, to deploy agents on a tail costs \$175,000 a month because it takes a lot of manpower. To put a GPS receiver in someone's car takes \$150 a month. But to tag a target's mobile phone, with the help of a phone company, costs only \$30 a month. And whereas paper records soon become unmanageable, electronic storage is so cheap that the agencies can afford to hang on to a lot of data that may one day come in useful.

Vague, very vague

But not everything is going the agencies' way. Indeed, many SIGINTERS believe that their golden age is already behind them. As the network expands, more capacity is being added outside America. By 2014, according to Mr Corera, the proportion of international data passing through American and British fibres had nearly halved from its peak. And the agencies have the capacity to examine only a small fraction of what is available. The NSA touches 1.6% of data travelling over the internet and selects 0.025% for review. Its analysts see just 0.00004%.

Data are also becoming harder to trace. Some protocols split a message in such a way that it passes over different networks—a phone connection and Wi-Fi, say. Others allocate IP addresses dynamically, so that they may change many times in a single session, or they share one between many users, which complicates identification. Still others take computing closer to the user, which means that messages bypass the core network.

The internet has many channels and communications apps, each with its own protocol. Work on new tools is 20-30% of the spooks' job. Even so, there are too many apps for the agencies to reverse-engineer, so they have to choose. An easy protocol might take a day to work around. A difficult one might take months. A routine upgrade of an app can mean having to start from scratch. And some means of communication are intrinsically hard to break. Messages worth collecting that are contained in apps like FaceTime and Skype are hard to tell apart from entertainment in Netflix and YouTube when they pass through networks. Jihadists can contact each other through online gaming chat rooms. Steganography hides messages inside images.

Encryption is becoming standard. If a message is sent via an app provider like Telegram or WhatsApp, the identity of the re-

ceiver might be encrypted, too. In principle modern encryption is uncrackable. Unless someone can build a quantum computer, which could search for multiple solutions simultaneously, working through the permutations would take a chunk out of the rest of history.

To get in, therefore, analysts often depend on human error. But the targets are becoming more sophisticated. The *New York Times* has reported that Abdelhamid Abaaoud, who directed a wave of bloody attacks in Paris in November last year, ordered a soldier to ring a mobile phone on Syria's northern border so that his call would pass through a lightly monitored Turkish network.

The result, case officers say, is that tracking jihadists takes increasing effort and skill. A few years ago one officer might watch several jihadist targets; today you need to throw a lot more manpower at the task. Too many jihadists have travelled to Syria for GCHQ to monitor them all. The intelligence services catch glimpses of what is going on, but not the full picture. “With encryption,” says a British officer, “maybe you see a bit of content, a bit of the puzzle.”

Some Western intelligence chiefs have tried to curb encryption, or argued that at least they should be given a set of secret keys. That would be impractical and unwise. Impractical, because watertight encryption programmes will then be written outside America and Europe, and there is little the authorities can do to stop it. Unwise, because the intelligence services are not the only ones prowling the web. Organised criminals and fraudsters would like nothing better than weaker encryption.

A better way to cope with the difficulties of intercepting traffic is to hack into machines sitting at the end of the communications chain. Once in, the agencies can look at a message before it has been encrypted, split into packets and scattered across the network. Again, though, that poses a dilemma, because governments are responsible for cyber defence as well as cyber offence. To gain entrance to a machine, hackers use flaws in software. The most prized of these are undisclosed and called zero-day vulnerabilities (because software engineers have zero days to write a patch). Stuxnet, a computer worm written by the Americans and the Israelis that attacked centrifuges in Iran's uranium-enrichment programme, exploited five zero-day flaws.

There is a market in such tools. When Hacking Team, an Italian cyber-company, was itself hacked in 2015, the world learnt that zero-day vulnerabilities were for sale. According to *Wired*, a magazine, the price started at hundreds of thousands of dollars. Among the buyers were governments and criminals. In their role as defenders, the NSA and GCHQ should be revealing software faults so that companies can write patches. In their role as attackers, they need some in reserve.

When machines are so powerful, where do people fit in? Certainly, signal intelligence is relatively cheap, versatile and safer than running human agents. Yet human spies still play a vital complementary role. One task is to furnish seed information that can serve as selectors for tracing contacts. Another is to gain access to computers that are well-defended or “air-gapped” from the internet. Most valuable of all is the human ability to bring judgment and context.

People also provide oversight. There was a time when the constraints on the agencies were technical and budgetary, because codes were hard to break and agents costly to deploy. In an era of cheap technology, it is difficult to know precisely what the technology will be able to accomplish. The constraints on the intelligence services' conduct must therefore be legal—and robust.

Edward Snowden and others have suggested that the agencies are unwilling to live within the rules. But is that criticism deserved? In the anxious times after the attack on America on September 11th 2001, how far did the CIA and the NSA really go? ■



Governance

Standard operating procedure

How the war on terror turned into a fight about intelligence

AFTER THE COLLAPSE of the Soviet Union, intelligence was becalmed. Apartheid came to an end, the Palestine Liberation Organisation said that it was abandoning terror, and economies around the world embraced the Washington consensus. The NSA, isolated by its own secrecy, was out of touch with the burgeoning internet; it lost 30% of both its budget and its workforce. Budgets at the CIA and MI6 were cut by a quarter. John Deutch, then the CIA's director, thought the future lay in signals intelligence and began to retire old hands in what became known as the "agent scrub". At gatherings of senior mandarins in Whitehall, Sir Colin McColl, then head of MI6, was asked by colleagues: "Are you still here?"

Everything changed on September 11th 2001. When al-Qaeda struck America, the recriminations flew. The CIA had been created after Pearl Harbour to guard against surprise attacks, yet in the 1990s the agency's bin Laden hunters had been marginalised as eccentric and obsessive. The intelligence agencies scrambled to make up for what the 9/11 Commission later called their failure "to connect the dots".

At the time, amid fears of the next assault, the intelligence agencies were called on to make the homeland safe. But when their conduct came to light later, in a less fearful world, they were condemned for their methods. The story of this whipsaw is a case study in how democratic, law-abiding societies struggle to govern bureaucracies that act behind a veil of secrecy. America has found the ensuing debate messy and bitter. The thing to remember, however, is that in other countries the debate barely took place at all.

One set of accusations was levelled at the "President's Surveillance Programme". Under this, the NSA intercepted international communications that it suspected had a bearing on al-Qaeda, even if one of the callers was in the United States and was thus protected by the Fourth Amendment, which guards Americans against searches or seizures without a warrant. The

agency also collected "metadata" (the details but not the content) of calls to, from and within America, acting outside the usual legal machinery. Administration lawyers advised that, as commander-in-chief, George W. Bush had war powers that overrode other laws.

A second set of accusations dealt with harsh treatment of prisoners by the CIA. In secret detention centres outside America it employed 13 techniques, including slapping, nudity and, notoriously, waterboarding. The aim was not to extract information directly but to break prisoners' will, so that they tipped from a "zone of defiance" to a "zone of co-operation" in which they would talk freely. In "extraordinary renditions" some prisoners were handed over to other governments. Although these were supposed to give America assurances of fair treatment, critics said that in practice nothing could stop them from using torture.

In all, the CIA dealt with fewer than 100 high-value prisoners, and half that number were rendered up. Bush administration lawyers advised that prisoners' treatment at the hands of the CIA stopped short of torture, which is illegal. Common Article Three of the Geneva Convention, which applies the stricter standard of cruel, inhuman or degrading treatment, was irrelevant, they said, because it applies only to civil wars.

Would you waterboard your daughter?

Both the surveillance and the interrogation programmes were to be mauled in the press, in Congress and in the courts. The Detainee Treatment Act, passed in 2005, banned cruel, inhuman or degrading treatment for any American prisoner. The same year the *Washington Post* revealed the existence of secret prisons in eastern Europe and others hinted at the harsh techniques. General Hayden, by then head of the CIA, reports that sessions between the agency and the House Security and Intelligence Committee descended into shouting matches. During one, he was asked if he would be prepared to waterboard his daughter. In 2006 the Supreme Court found against Mr Bush's legal team and ruled that Common Article Three did in fact protect al-Qaeda prisoners. Early in his presidency, Barack Obama restricted interrogators to mild techniques, such as exploiting the subject's fears and resentments or offering small rewards like cigarettes, laid out in the revised Army Field Manual. In effect, the vestiges of the CIA interrogation programme were shut down.

A chunk of the surveillance programme followed a similar trajectory. Reports about it surfaced in the *New York Times* in 2005 (though the paper had been sitting on the story for over a

► year), with an account of warrantless collection of information. The extent of the programmes became clear only in June 2013, when Edward Snowden released his trove of NSA files (see box). Immediately it became obvious that a few months earlier James Clapper, the Director of National Intelligence, had misled Congress. When asked whether the NSA collected “any type of data at all on millions or hundreds of millions of Americans” he had replied under oath, “No sir”, and given a chance to clarify his answer, he continued: “Not wittingly.”

At the end of 2013 a presidential review panel and in early 2014 a government agency, the Privacy and Civil Liberties Oversight Board, both issued withering critiques of the metadata collection. The law says that the government can seize metadata if they are “relevant” to an FBI investigation. That language, the oversight board concluded, is not broad enough to allow the NSA to seize the whole lot before an investigation has begun. In May 2015 a federal appeals court in New York agreed. And a month later the USA Freedom Act gave the NSA six months to stop warehousing metadata—though it allowed the agency to go to telecommunications companies with specific queries.

Grey areas

This saga raises two questions about America’s system for running the intelligence agencies. The first involves the role of the president. Both the surveillance and the interrogation programmes, as well as the legal opinions justifying them, were secret. In itself, that was legitimate and perfectly sensible, because otherwise the jihadists might have learnt about them and altered their behaviour accordingly. But the Bush legal team rested on maximalist interpretations of the president’s war powers, which the courts were later to strike down.

At the same time the secrecy the administration insisted on was extreme. Even the chief counsel of the NSA was not allowed to read the basis for his own agency’s surveillance programme, and its inspector-general, in effect its regulator, was not told of the programme’s existence for several months. If—or more likely when—tight security fails, the combination of controversial legal opinion and general shock risks a humiliating climbdown. That does the agencies no good at all.

Second are doubts about governance. Congress and the courts are supposed to check the executive, but questions hang over both. At the start Congress was pliant. “There was some oversight,” says Matthew Aid, a former intelligence officer who writes about the NSA, “but I have seen kittens protest more loudly.” Later, amid popular anger at the programmes, members queued up to chuck rotten tomatoes. Part of the problem is structural. The House and Senate Committees meet in camera and much of their debate is classified. One former official at America’s Defence Intelligence Agency points out that, since the members get no chance to grandstand to their voters back home, sit-

You’re US government property

Is Edward Snowden a villain or a hero?

EDWARD SNOWDEN HAS plenty of fans. A film about him by Oliver Stone describes how, as a contractor with Booz Allen Hamilton, Mr Snowden turned against the system and smuggled out files about its spying activities. To coincide with the release of the film in September, the fans have launched a campaign for his pardon. No one else has sparked such an intense debate on public policy, they say. He won a change in the law and shifted global attitudes to privacy.

Having fled to Hong Kong, Mr Snowden later took refuge in Moscow, where he now lives under the protection of the Russian government. If he returned to face trial in America he would not be able to mount a full defence. The Espionage act, under which he would be tried, does not allow him to appeal to the public interest. Yet even if he could, he would probably be convicted. And rightly so.

America’s House Permanent Select Committee on Intelligence recently published its own verdict on Mr Snowden, calling the leak “the largest and most damaging public release of classified information in US intelligence history”. It endangered troops and agents overseas and undermined defences against terrorism. The vast majority of the documents Mr Snowden stole did not touch on the privacy of American citizens. Instead, they revealed details of how the NSA spies on non-Americans, including foreign leaders, who do not enjoy constitutional protection.

The committee says that America may have to spend hundreds of millions or even billions of dollars to mitigate the damage.

Others point out the indirect costs. Private companies were embarrassed by being shown to co-operate with the American authorities. The very fact that the leak took place may lead people and companies to conclude that to work with America is not safe. That feeling will have been reinforced by the arrest last month of a second contractor, Hal Martin, on suspicion of having stolen classified material, though as yet there is no evidence that he passed it on.

Mr Snowden’s supporters claim that he is a whistleblower. But the committee found that he made little or no attempt to raise his concerns with his superiors. If they had proved unsympathetic, he could have gone to the NSA’s inspector-general, or to the committee itself.

Mr Snowden’s boss at the NSA in Hawaii, Steven Bay, also worked for Booz Allen Hamilton. He lost his job over the leak. Speaking in September to *Cipher Brief*, a newsletter, he attested to Mr Snowden’s intelligence and ability but questioned his qualifications for speaking out. “He never actually had access to any of that data,” Mr Bay said. “All of the ‘domestic-collection stuff’ that he revealed, he never had access to that. So he didn’t understand the oversight and compliance, he didn’t understand the rules for handling it, and he didn’t understand the processing of it...In my mind Ed’s not a hero.”

ting on the committees offers little reward.

The worries extend to the special intelligence court, created under the Foreign Intelligence Surveillance act. It was informed early on about the collection of metadata, and in 2006 was formally brought into the process and asked to issue general warrants. The court asked for changes to strengthen protections for Americans. However, compared with the New York appeals court and much other legal opinion, it leant heavily towards the administration. The suspicion is that, like any regulator, it had started to see the world through the eyes of its charge.

Before you conclude that the system is broken, however, look for a moment at the other side of the coin. Intelligence law is complex and often secret. This has meant that reasonable complaints against the agencies have become mixed up with unreasonable ones and with outright errors to form one great hairball of moral outrage.

For instance, there were reports that the NSA broke its own privacy rules thousands of times a year. That sounds alarming. In fact, two-thirds of these breaches involved calls between legitimate non-American targets who just happened to be in ►►

► America at the time—and were thus temporarily protected by law. Most of the rest were selectors wrongly entered in the database because of poor typing or overly broad search criteria. Instances of genuine abuse tended to involve intelligence officers checking up on their partners (known, inevitably, as LOVEINT). Defending the programme, General Hayden points out that all but a handful of the NSA's 61m inquiries were legitimate. The newspaper headlines, he says, should have said, "NSA damn near perfect".

From the press coverage you get the sense that the agencies were out of control. In reality they are highly bureaucratic. In the metadata programme each search of a seed had to be approved by one of 22 supervisors. The foreign programme established tests to ensure that targets are not American, likely to be outside the United States and likely to provide useful intelligence. The "audit trails are baked into the process", says a former intelligence-oversight official at the Department of Defence. "There are triggers and warnings to managers of improper searches within the datasets."

Despite this, there is a persistent notion that the intelligence agencies undertake mass surveillance. That is partly because some critics elide foreigners, who are not protected, with citizens, who are. Although the Privacy and Civil Liberties Oversight Board condemned the metadata programme, it made clear that "compliance issues [did not] involve significant intentional misuse of the system. Neither has the board seen any evidence of bad faith or misconduct." When a senior British judge was asked whether GCHQ engaged in random mass intrusion into citizens' private affairs, he replied "emphatically no". According to Sir Iain Lobban, a former head of GCHQ, "if they were asked to snoop, I wouldn't have the workforce; they'd leave the building."

The idea has also got about that intelligence is ineffective against terrorists, and that its true purpose must therefore be to spy on ordinary people. That conclusion has arisen partly because the oversight board found that the metadata programme did not add anything to the NSA's understanding of terrorism. Intelligence chiefs are to blame, too, for making claims about their achievements that they could not substantiate.

However, the oversight board found that the other, foreign programme made "a substantial contribution to the government's efforts to learn about the membership, goals and activities of international terrorist organisations, and to prevent acts of terrorism from coming to fruition." For instance, it helped to identify the courier who led to Osama bin Laden. Between 2002 and 2013 the NSA helped foil 17 terrorist plots against New York. In Britain MI5, MI6 and GCHQ convinced David Anderson, an in-

The subtle point critics of American intelligence often miss is how the system, taken as a whole, has tended to right itself

dependent reviewer appointed by the government, that communications data has played a "significant" role in every counter-terrorism operation in the decade to 2015.

The same is true for harsh interrogation. It would be convenient if inflicting pain on prisoners was pointless as well as wrong. However, many people in government and the intelligence services attest to how the three people who suffered waterboarding gave up a lot of information; the CIA's former counter-terrorism chief, Jose Rodriguez, called them "walking libraries". The decision to abstain from such techniques, just and wise though it was, came at a cost.

I see

United States Intelligence Community
17 government agencies:



The subtle point critics of American intelligence often miss is how the system, taken as a whole, has tended to right itself. Ben Wittes, of the Brookings Institution and editor of the *Lawfare* blog, says that after the initial reaction to 9/11 there was a broad correction in the following years. The last waterboarding took place in 2003. When General Hayden became director of the CIA in 2006, he stopped the most extreme treatment. "Presidents—any president—get to do one-offs based on raw executive authority," he has said, "but long-term programmes, like this one had become, needed broad political support."

Likewise, thanks to growing discomfort within the Justice Department, the FBI and the NSA—and a lot of courage from some officials—the metadata programme was brought under the control of the intelligence court. "When the terror threat receded a bit," says the former intelligence-oversight official, "people stepped back and privacy and civil liberties came to the fore."

Some intelligence folk think that the clamour for action immediately after 9/11 and the condemnation of the intelligence services later, when the world no longer seemed so dangerous, is an example of double standards. There is something to that. But the whipsaw is also a consequence of secrecy. For the truth to emerge, as it inevitably will, takes time. And when it does, the intelligence services can seem sly and out of control. Mr Wittes believes they would do better to be open about what they do, and "to sacrifice some degree of effectiveness to win trust".

Counter-terrorism has left its mark on the intelligence services. The old guard had a variety of experience, say the experts at RAND, but the young tend to know only about Iraq or Afghanistan. That will remain useful: even if Islamic State fades, jihadists will continue to attack the West. But the old adversaries never went away. Indeed, the spy agencies of Russia and China have taken advantage of the terrorist distraction to hack American networks. That, says Seth Jones of RAND, is where the attention is shifting right now. ■

China and Russia

Happenstance and enemy action

Western intelligence agencies are turning to the old rivalry with Russia and the new one with China

MOST COUNTRIES HAVE spy agencies of one sort or another, and their efforts may well be directed chiefly against their own people. Many are a legacy of colonial rule. An agency's clout is often at odds with its country's place in the world. Brazil's intelligence services are puny compared with those of Peru and Colombia, which fought off Marxist narco-guerrillas. India's Research and Analysis Wing is a minnow next to Pakistan's tentacular Inter Services Intelligence. Israel's Shin Bet and Mossad are world-class.

In an era dominated by terrorism, many of these services work with the big Western agencies such as the CIA or France's Direction Générale de la Sécurité Extérieure. The locals are more successful at infiltrating their agents and have a better understanding of their own region. In return for collecting intelligence on the ground, the liaison services get help, often in the form of signal intelligence (SIGINT) or satellite imagery (IMINT).

Sometimes, however, the story is all about rivalry, most of all between the West and Russia and China. Russia has the higher profile, probably intentionally. In 2015 James Clapper, America's director of national intelligence, told Congress that Russia was America's main cyber threat. In the past few months alone it is thought to have scored a number of points.

One was to humiliate the NSA by putting a stolen suite of its hacking tools on sale under the cover name Shadow Brokers. Another was to hack the medical records of Simone Biles, an American gymnast who won four gold medals at the Rio Olympics. Russia also undermined the presidential campaign of Hillary Clinton by releasing e-mails from its hacks of the Democratic National Committee and Colin Powell, a former secretary of state.

"Active measures" like this draw on techniques of manipulation, misinformation and infiltration that go back to the tsars. What is new, says Fiona Hill, a Russia expert at the Brookings Institution, is the lack of restraint. "Snowden blows everything open," she says. Now that Russia can say America is up to the same tricks, there is no need for secrecy.

Influence by insinuating

Russia's foreign-language television station, RT, and news agency, Sputnik International, work by what might be called "insinuating"—a slur on the integrity of an opponent, the false reporting of an anti-Russian war crime in Ukraine, a relentless focus on racial tensions in American cities. The idea is to fan the flames of fear, resentment and division. Russia is active across the West. A recent report by the Centre for European Policy Analysis in Washington and the Legatum Institute in London, written by Edward Lucas (a journalist on this paper) and Peter Pomerantsev, accuses it of "seeding fear of Western institutions and alliances (Lithuania); fomenting insurrection (eastern Ukraine); general denigration of a country's international reputation (Latvia); the development of native pro-Kremlin media (the Czech Republic and Estonia); and support for far-right and ultra-nationalist movements and sentiments (Poland)."

Having seen how effective Russian misinformation was in splitting off Crimea from Ukraine, some in Washington feared that Russia might try to swing the presidential election in favour



of Donald Trump. By revealing that Bernie Sanders, a popular candidate on the left, was locked out by the powers in the Democratic Party, it made American politics look rigged. And by undermining Hillary Clinton and casting doubt on the result, it could weaken her. That would be a fine day's work for Russia's leader, a former KGB officer called Vladimir Putin.

However, a recent paper from the Aleksanteri Institute in Finland points out that Ukraine was vulnerable because of its weak government and the presence of large numbers of Russians in Crimea, including soldiers, and goes on to question whether Russian tactics would work more generally. Another study, by the Finnish Institute of International Affairs, also concluded that Russian strategic deception has its limits. The authors did not find a single case of Russian misinformation bringing about meaningful change in the West.

That leaves policymakers in a quandary. If governments complacently leave misinformation unanswered, they risk the spread of potentially harmful ideas. If, on the other hand, they build up Russia's actions into a grave threat, they also build up Russia's stature. That would be to do Mr Putin's work for him.

China has emerged only recently as a great power in intelligence. During the Cultural Revolution its security services persecuted the opponents of Mao Zedong. As part of the purge, the Central Investigation Department—which was to become the Ministry of State Security (MSS)—eliminated officers with foreign experience who, by definition, included those in its foreign-intelligence service. China had little expertise in SIGINT.

Its chance to catch up came in the late 1990s, with the shift from breaking codes to hacking computers. Peter Mattis, a China expert at the Jamestown Foundation, compares the innovation to the launch of Britain's *Dreadnought* battleship a century ago, which revolutionised naval warfare. China has used the communications revolution to become a world SIGINT power.

Much of its effort is still focused inward. Nigel Inkster, a China expert who was a senior intelligence officer with MI6 and is now at the International Institute for Strategic Studies, reports how a defector defined the role of the security services as first of ➤

all to “control the Chinese people to maintain the power of the Chinese Communist Party”. Their task was to counter the “evil forces” of separatism, terrorism and religious extremism. They accomplished this partly through sheer manpower. In one district of 400,000 people, fully 4% of the population was on the payroll, outstripping the East German Stasi in its pomp. But they also make good use of technology. Mr Mattis explains how their Golden Shield project tags potential troublemakers. You never know who is under scrutiny. In 2015 Qiu Jin, an MSS vice-minister, was briefly arrested, possibly after requesting the bugging of senior leaders.

In the 18th century Jeremy Bentham, a British philosopher, invented a prison in which a single watchman could observe all the prisoners all the time, calling it the Panopticon. Mr Mattis believes that Bentham’s idea is coming to life. “China’s goal,” he says, “is as close as you’re going to get to the real Panopticon.”

As China’s interests have become more international, so have the intelligence services. For many years their specialism was industrial espionage. As early as 1987, Deng Xiaoping launched “Plan 863” to establish China’s independence in strategic industries. One of the first hacks to be detected was Titan Rain in 2003, in which terabytes of data were taken from Sandia National Laboratories, NASA and American defence contractors.

Over the years, Chinese hackers are believed to have sucked out details of the B1 bomber, the B2 Stealth bomber, an advanced submarine-propulsion system and a miniaturised nuclear warhead, as well as countless industrial and scientific processes. China was also suspected of stealing the blueprint of Australia’s new intelligence headquarters. Even today, according to Matt Brazil, another fellow at the Jamestown Foundation, China’s five-year plans tell you what technologies the country will seek to obtain through research, deals or, if necessary, theft.

By 2013 the Obama administration had had enough. With official blessing, a computer-security company called Mandiant released a report saying that one of the main hackers was Unit 61398 of the People’s Liberation Army, based in Shanghai. Mandiant claimed to have spotted the unit inside no fewer than 141 companies. Known as Comment Crew, it included hackers with aliases such as UglyGorilla, and had broken into companies linked to electric power, water and natural gas. Once in, the hackers typically stayed for almost a year.

In 2014 the Department of Justice charged five members of Comment Crew with hacking into American steel, solar and nuclear firms, and published mugshots of the hackers, including UglyGorilla. Two of the men were in military uniform. America also threatened to bring suits against Chinese companies, including Chinalco, Boasteel and State Nuclear Power Technology Cor-

Habitual intruders

Suspected Chinese hacks of Western networks

Year	Hack
2003	Intrusions into networks of America’s government and its contractors
2006–07	Britain, Germany and New Zealand publish details of alleged attacks linked to China. Britain’s security services alert private companies
2009	Attacks on the Dalai Lama’s systems, and on American oil and gas companies
2010	Hacking operations target Google, Chinese dissidents’ accounts, Adobe, Dow Chemical and Northrop Grumman
2011	McAfee reveals intrusions into the networks of governments, private companies and international organisations
2012	The NSA’s director confirms Chinese attack on a security authentication system used by Pentagon contractors
2013	US Defence Science Board reports that weapon designs have been compromised
2014	Novetta, an American analytics company, reveals the activities of a cyber-espionage group targeting groups seen as hostile by China, undetected for six years
2015	Hackers breach American government databases, compromising the details of 25.7m federal employees

Source: “China’s Cyber Power”, by Nigel Inkster

poration. The threats seemed to work. Since Barack Obama and Xi Jinping agreed to curb cyber-espionage in September last year, far fewer Chinese hackers have been detected (see chart).

China is less well known for its HUMINT, but it does pursue businesspeople with a background in Western governments. Since the mid-1980s it has often used sex as a lure. According to Mr Inkster, a Japanese diplomat committed suicide in Shanghai in 2005, supposedly after having got caught in a honey trap.

China’s spying is a fundamental expression of its rise as a great power and its growing rivalry with America—just as the creation of modern espionage and counter-espionage dates back to Germany’s challenge to Britain at the start of the 20th century. No longer is China interested principally in looking after the Chinese diaspora. Today it cares about American policy in, say, Japan and South Korea, as well as Brazil, where it buys its food, and Saudi Arabia, where it buys its oil.

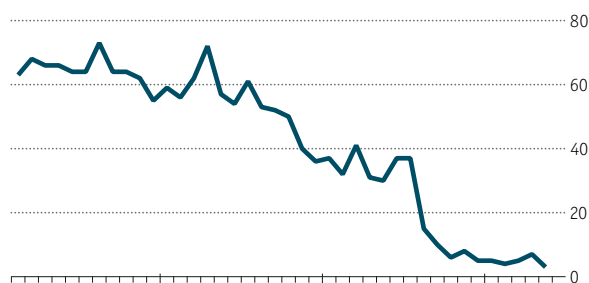
This has a dark side. According to Mr Inkster, China is convinced that America is exploiting its hold over the internet to perpetuate its hegemony and to spread subversion. That was one reason why China helped Iran suppress the liberal Green Movement when it rose up against the mullahs in 2009. Both China and Russia suspect that America uses the internet to try to inject Western values into their countries. Mr Putin has described the internet as a “CIA project”. China sees American condemnation of hacking as hypocrisy. Last year the Xinhua news agency published an article entitled “The USA Talks of Cyber Security and the World Laughs”.

This could have consequences. China has put forward a “new security concept” in which international law is subordinate to national interests. In June the Global Commission on Internet Governance warned that governments might further Balkanise the internet, at a cost to the global economy and to freedom of expression.

Intelligence will partly define relations between China and America. It need not always lead to hostility. By helping each side understand the other better, intelligence can also lower tensions—much as in the late 1950s satellites and spy planes diffused American fears of a “missile gap” with the Soviet Union. But the stakes are high. General Hayden thinks that most intelligence domains can withstand some mistakes. With intelligence towards China, he says, there is no room for error. “No one else is in the same area code. It’s pass-fail.” ■

When the boss said stop

Active network breaches conducted by 72 suspected China-based groups



Source: FireEye iSight Intelligence

How to do better

The solace of the law

A blueprint for the intelligence services

IN THE SPY MUSEUM in Washington, DC, a floor is given over to James Bond. Pay attention to the villains, says Vince Houghton, the museum's historian: each tells you what the West was scared of when that particular film was made. Bond is sandwiched between the paraphernalia of real-life spying, including bugs, silk maps and cipher pads. But his wayward independence looms over the whole business. The thing about spies, says Kelley Ragland, who publishes modern spy novelists, including Olen Steinhauer, is that they are lone wolves who survive without help. "They are underdogs," she says. "We root for them."

The intelligence officers featured in this special report break some rules, too. All nations make espionage against them a criminal offence. They consider foreign citizens fair game, on the ground that their duty is to maximise the well-being of their own people. But at home, too, they can intrude into lives, playing on people's fears or vanities, issuing threats or offering money. The question is how an open, democratic society should govern their behaviour. Too much power and secrecy, and they will go astray. Too little, and they will fail.

Sir David Omand, a former head of Britain's GCHQ, says that lawful spying should be governed by ethics in the same way that a just war is. And David Anderson, in his review of the Investigatory Powers bill, which by the end of this year will for the first time put British intelligence on a unified statutory footing, offers a blueprint for what this might look like.

Five principles

Because of the need for security, he argues for minimal no-go areas. The state needs to be able in principle to bug bedrooms, read diaries and, if necessary, listen in to conversations between lawyers and clients or journalists and sources. "The issue is when it should be lawful to exercise such powers," he says, "not whether they should exist at all". Drawing on international human-rights law, he sets out five principles for their use:

- The law must be accessible—easy to obtain and understand; and it must operate in a foreseeable way.
- Spying must be necessary, which means more than useful. On

September 12th 2001 necessity was different from what it had been on September 10th.

- Measures must be proportionate. Squeezing privacy brings diminishing returns.
- There must be effective monitoring and oversight.
- There must be redress by an independent tribunal for those who have been mistreated.

This legal footing serves as a foundation. But the intelligence services also need to command public trust, says John Parachini of RAND. If you are seen to deviate from expectations, you run risks. Unless they explain why capabilities are needed, says Courtney Weinbaum, also of RAND, agencies cannot justify their budgets or programmes to voters and taxpayers. As director of the NSA, Michael Hayden used to map out what the agency did as a Venn diagram with three circles, labelled technologically feasible, operationally relevant and legal. After he became director of the CIA a few years later, he added a fourth: politically sustainable.

The essential ingredient is transparency—or, rather, what Michael Leiter, head of the National Counterterrorism Centre under George W. Bush, has called "translucence". The public needs to know the broad outline of what the security service is doing, but not the details.

Reporting to Barack Obama, the presidential advisory group invoked what it termed the "front-page rule": that the agencies should forsake any programme which could not command the consent of ordinary people if leaked to a newspaper. General Hayden thinks the intelligence services should be more willing to let retired officers write books and speak to journalists. "Too much is protected," he says. "We need less secrecy. We need to be the teller of our story, not the keeper of secrets."

An effort to restrict classification is overdue, especially in America, where nearly 1.5m people have top-secret clearance. In 2012 the presidential libraries contained 5bn pages waiting to be reviewed for declassifying. Mr Parachini believes that a small amount of secret intelligence must be guarded with extreme care. Insights can come from publicly available sources at a small fraction of the cost and be widely shared to prevent terrorist attacks or prepare for political and military surprises.

In terms of public relations, the West's intelligence services have endured a difficult decade and a half. In terms of their operations, however, the years since 9/11 have seen extraordinary shifts in focus and capabilities. Increasingly, society is asking them for protection from criminals and paedophiles as well as terrorists and foreign powers. It is a vast agenda.

The rules governing their actions have not always kept pace with the public mood. However, in fits and starts, the intelligence services have adapted. It is right that they should be held to high standards. But their critics should also remember that the world is dangerous and hostile, and that the intelligence services are often the best protection ordinary people can hope for. ■

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In principle, the state needs to be able to bug bedrooms, read diaries and listen to privileged conversations



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Zimbabwe

Life after Bob

HARARE

Broke and divided, Zimbabwe's government is preparing for Mugabexit

IN MANY of the poorest African dictatorships of recent decades, the best-paved road ran from the presidential palace to the airport, in case the Big Man and his entourage needed to escape in a hurry. That is still the case in Harare, Zimbabwe's capital, where the president's cronies know that they are not universally popular.

Some leading figures in ZANU-PF, the ruling party, are said to have shipped belongings abroad already. Some apparently keep bags packed for the moment that Robert Mugabe, the 92-year-old president who has ruled for 36 years, keels over or is pushed aside in a palace coup. Others are said to be sleeping in different places every night, to confound potential assassins or soldiers who they think might be sent to kill or arrest them.

They have reason to be nervous. The regime's collapse has often been predicted before, and the pundits, including this newspaper, have always been proven wrong. Still, Mr Mugabe cannot live for ever, and the economy is in an even worse state than usual.

Start with the doddering despot. Mr Mugabe has long kept his party in line by playing off one faction against another with Machiavellian skill and, in the words of a former cabinet minister, "charming you while preparing to stab you in the back". Yet now he dozes off in meetings and suffers startling lapses in memory. Recently he is said to have delayed the start of

a cabinet meeting because he was waiting for Joice Mujuru to arrive, forgetting that he had fired her as vice-president two years ago. To be fair, Mr Mugabe also has moments of lucidity. He may ramble, but his supporters note that few other men of his age can stand and deliver an hour-long speech. And he is adaptable in the face of infirmity: after reading the wrong speech at the opening of parliament last year he has taken to speaking off the cuff instead.

Yet potential successors are beginning to circle. Chief among them is his vice-president, Emmerson Mnangagwa (pictured, left, with Mr Mugabe), who once led the security service. The goons may decide to back the man they know and trust. This matters in Zimbabwe, where several party

figures have died in mysterious car accidents or house fires over the years.

A faction in the party has pushed for Mr Mugabe to be succeeded by his wife, Grace, an avid shopper. But several of her leading supporters have been accused of corruption and their group, nicknamed the G40, is on the back foot. Moreover, her support in the party will probably count for little if Mr Mnangagwa has the army on his side.

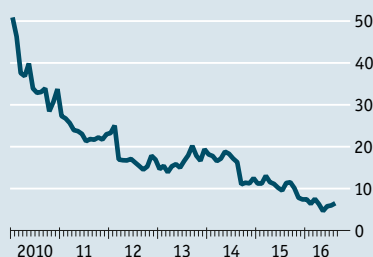
Elections are scheduled for 2018. Mr Mnangagwa, however, is so widely disliked that he would find it hard to win even a rigged ballot. (He denies allegations that he was a cheerleader for the massacre of 20,000 people in Matabeleland in the 1980s, when he was Mr Mugabe's intelligence chief.) Searching for allies, he has even been talking to members of the hopelessly divided opposition. Once in power he will probably try to cajole them into joining a coalition rather than risk them uniting against him. In this Mr Mnangagwa may have the support of Western governments who hope he will establish order quickly and start fixing the economy, and may turn a blind eye to his thuggery.

Mr Mugabe's government has long tried to defy the laws of economics—one former governor of the central bank even insisted they did not "fully apply in this country". But it takes real ingenuity to wreck the currency of a country that has adopted the American dollar.

The government has already ruined its currency once. After spending more than it collected for so long that no sane person would willingly lend to it, the regime cranked up the printing presses. By 2008 it was printing 100-trillion Zimbabwe-dollar notes that were worth less than a bus ticket. The hyperinflationary madness only stopped when the government scrapped the Zim dollar and started using American greenbacks instead.

That's the way the money goes

Zimbabwe, hard-cash holdings*
As % of commercial-bank deposits



Source: Reserve Bank of Zimbabwe

*Cash held in national banks plus balance held at foreign banks

▶ Old habits die hard. Mr Mugabe's government has again been spending too much. Despite solemn promises to the IMF to come close to balancing its budget, the deficit this year will be about \$1bn, a massive 8% of GDP. It has been burning through its dollar reserves at such a clip that earlier this year it seemed unable to pay civil servants.

But the Reserve Bank of Zimbabwe can still be creative. It came up with a ploy to "print" American dollars by filching them

from accounts in Zimbabwean banks and replacing them with worthless IOUs. Thus it turned each dollar into two dollars: one in electronic form in a bank (one might call it the Electronic Zimbabwe Dollar, or EZD) and the second a normal dollar that the government gets to spend.

Surprise, surprise, ordinary Zimbabweans now find it hard to withdraw their own money from their own accounts. Even the official statistics admit that there are not many real dollars left (see chart on

previous page). Most banks have capped withdrawals at \$40-\$50 a day. People line up for hours to get their money. Cash is so hard to come by that almost everyone now pays electronically using bank cards or mobile money. In the Anglican Cathedral of St Mary and All Saints a sign displays a mobile-money number for donations.

Although Zimbabwe does not officially have its own currency, its EZD is behaving a lot like one. It can be used at home (in electronic format) but not abroad. When banks ask the central bank for real dollars to pay for imports they wait months for the money, if they get it at all. Black-market dealers now convert electronic dollars into real ones at a premium of 10-15%. Many market traders now insist on being paid in cash. Airlines are doing the same.

How long can all this last? The soldiers who prop up Mr Mugabe's regime are said to have insisted on being paid in real cash, not funny electronic dollars. Imported goods are running out. Inflation will soon reflect the growing spread between real dollars and electronic ones.

Zimbabweans have long yearned for the post-Mugabe era. Sadly, it will probably not mean a restoration of real democracy. And cleaning up the mess Mr Mugabe has made will take years. ■

Fighting fires in South Africa

Burning down the house

CAPE TOWN

Shack fires are a menace that simple fixes could help prevent

IT CAN take less than two minutes for a shack to be engulfed by flames, from a fallen candle or a knocked-over paraffin lamp. Shack fires in densely-populated South African slums often spread quickly and can threaten whole neighbourhoods. In Cape Town alone there were 1,519 fires in jam-packed informal settlements in 2015. Over 5,000 homes were affected. Around 100 people a year die in such blazes. "We are generally desensitised to hearing of yet another fire. The cost of human lives has no bearing here," says Ashley Stemmet, who is trying to get that number down.

In May 2015 Mr Stemmet co-founded the Khusela Ikhaya Project, which is busy painting shacks with fire retardant paint. When exposed to heat, the paint chars and swells to form a shield that slows the fire's spread. The project has already painted 2,000 homes, and ambitiously aims to cover 500,000 by the end of 2020. When a fire broke out at one of its pilot sites in May, residents who had lost their homes in previous fires testified to its worth. In an area containing some 400 dwellings, only 10 were burnt. No lives

were lost. Without the paint, things would have been a lot worse.

Other organisations are going more high-tech. Lumkani, a Cape Town startup that is also trying to tackle shack fires, has designed a cheap early-warning fire-detection system. When its battery-powered detector is triggered, it alerts neighbouring devices and sends an SMS with the fire's location to community leaders and the local fire department. Its detectors are already in 8,000 homes across South Africa. According to the company's co-founders, the devices should not just save lives, but will reduce the costs of firefighting and rebuilding.

Meanwhile, local authorities are trying to teach people how to prevent fires. In Cape Town, the Fire and Rescue Service visits schools and runs campaigns on the dangers of open flames. Many slums are hard for the emergency services to enter, thanks to informal structures that block streets. To let the firefighters in, officials sometimes order these ill-placed shacks to be torn down. The owners are invariably furious. But their neighbourhoods end up safer.

South Africa's courts

Judges v Jacob

JOHANNESBURG

A South African institution that works

WHEN Jacob Zuma's lawyers raced to court recently to stop the release of a report finding evidence of "state capture" by the president's wealthy cronies, the cameras were waiting. A live broadcast of proceedings dominated South Africa's TV news. Viewers hung on hours of dry legal arguments, for all the world as if watching a juicy soap opera.

An unexpected by-product of Mr Zuma's scandal-plagued presidency has been a growing public interest in the justice system. Faced with politically sensitive cases, and under enormous scrutiny, South Africa's courts have proven fair and effective. After hearing arguments, a panel of High Court judges ordered that the report by South Africa's anti-graft ombudsman be released that very day. When the country's highest court ruled in March that Mr Zuma had violated the constitution in a row over taxpayers' cash spent on his private village estate, proceedings were similarly broadcast live to a rapt nation.

The African National Congress (ANC) still dominates parliament, despite deep- ▶▶



Easy to start, hard to stop

ening rot under Mr Zuma and opposition gains in August's local elections. But the courts are seen as an arena where opposition parties and all kinds of activists can challenge the ANC and win. The judiciary has also acted as a bulwark for South African democracy at a time when other institutions, including the police and state prosecutors, have been compromised. A court held the government to account during a visit last year by Sudan's president Omar al-Bashir, ordering his arrest in accordance with an International Criminal Court warrant. Sadly, government lawyers appeared to drag their feet as Mr Bashir fled the country.

Experts, however, fear an over-reliance on the courts, in particular when it comes to fighting political battles. Pierre de Vos, a constitutional law professor at the University of Cape Town, worries that such "lawfare" could place great strain on the judiciary, by leaving judges vulnerable to politicised attacks. Mr Zuma has tried this on, complaining at a weekend rally in rural KwaZulu-Natal that the space for democratic debate had been taken over by the courts. "If there are strong political forces aligned against the courts, it can in the long term be bad for the judicial system," Mr de Vos says.

Mr Zuma faces a stack of legal challenges. One of the most explosive is the potential reinstatement of 783 counts of fraud, corruption and racketeering related to an arms deal. He also may face a return to South Africa's Constitutional Court over his failure to sign a bill intended to fight global money laundering.

Meanwhile, he is no slouch at using the courts himself. He is expected to seek a review of the report by Thuli Madonsela, the former anti-corruption ombudsman, in which she called for a judicial commission of inquiry into high-level corruption. The opposition Democratic Alliance, for its part, is considering laying charges against Mr Zuma for lying under oath in relation to this report.

Keeping up the pressure is South Africa's fiercely combative civil society. Johann Kriegler, a retired Constitutional Court judge, leads an advocacy group called Freedom Under Law. His group, along with the Helen Suzman Foundation, a liberal think-tank, is seeking the removal of the chief prosecutor, Shaun Abrahams, who last month announced flimsy charges against the finance minister—a respected rival of Mr Zuma—before hastily withdrawing them due to lack of evidence. The foundation is also due in court next month over the removal of the head of the Hawks, an elite police unit that critics believe may have been misused for political gain. Mr Kriegler says the courts have shown themselves up to the challenge. "I think our judiciary has covered itself with considerable glory," he says. ■

Egyptian politics

Sense and sensitivity

CAIRO

Abdel-Fattah al-Sisi's reforms will make him unpopular. Can he stand it?

WHEN Abdel-Fattah al-Sisi, Egypt's authoritarian president, called for change in September, it was sadly not an appeal for political reform. Rather, Mr Sisi was asking for his citizens' spare piastres (each worth less than a cent) in order to fund development projects. Given the scale of Egypt's economic problems, and the state of most peoples' finances, the idea was widely mocked on social media. "It's getting embarrassing," went one tweet.

Though he often paints himself as Egypt's saviour, Mr Sisi, a former general, has struggled to come to grips with an economy buffeted by terrorism and political upheaval since the revolution of 2011. High unemployment (over 12%) and soaring inflation (over 14%) have eroded his popularity. Polls can be fuzzy in Egypt, but one conducted by Baseera, a local pollster, shows Mr Sisi's approval rating dropping 14 points in the past two months.

It is likely to slump further. After dithering for over two years, Mr Sisi is finally enacting painful but necessary economic reforms. In October the government instituted a value-added tax to raise revenue. This month it went even further, allowing the overvalued Egyptian pound to float. Cuts to expensive subsidies are also being introduced. It is all part of an effort to win over the IMF, which now seems likely to approve a \$12 billion loan over three years. With a budget deficit likely to exceed 12% this year, the government desperately needs the cash.

The moves come as high prices fuel discontent. While the government defended the Egyptian pound, its value plummeted on the black market. Untethered, it is trading around 50% below the old rate. This has caused prices to soar, since Egypt im-

ports many staples. Products such as sugar and baby formula have at times been unavailable. Nearly three-quarters of those who disapprove of the president cite such hardships as the reason, according to Baseera—and more are speaking out. "I can't afford to eat," screamed a man in Alexandria, after he set himself on fire last month.

The situation is likely to get worse before it gets better. Most analysts believe that by delaying the reforms, Mr Sisi has made them more painful. Planned cuts to subsidies on fuel and electricity will further stoke inflation, even as the value of Egyptians' savings has collapsed. So the government has been cautious. Take fuel, which the state imports and sells below market price. After the devaluation, it let the price rise in local-currency terms, though not enough to offset the devaluation, so the cost of the subsidy rose. Real cuts are not expected until next year.

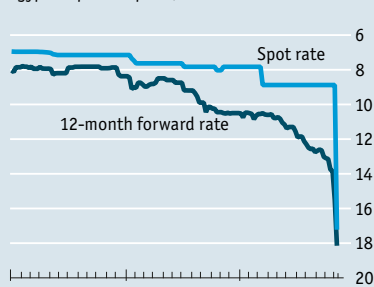
The crisis evokes memories of 1977, writes Adel Abdel Ghafar of the Brookings Doha Center, a think-tank. Then Egypt was negotiating a loan from the World Bank, which demanded bold moves, such as devaluing the pound and reducing subsidies. When the government announced higher prices for everything from flour to rice, there were riots. Anwar Sadat, then president, labelled the unrest the "intifada of thieves". But within days he backed down, cancelling the price hikes and ordering the army to restore order. Mr Sisi, for his part, has raised the price of sugar, but also increased subsidies on other basic foodstuffs. The IMF insists that the Egyptian government is calling the shots. Not everyone believes this.

The president may still face unrest. Rumours abound of a protest over the economy on November 11th—though no one is sure who is behind it, or if it will happen. H.A. Hellyer of the Atlantic Council, an American think-tank, doubts that there will be big demonstrations. After years of tumult, including a revolution and a coup, Egyptians are tired. Moreover, the government has cracked down on those it sees as troublemakers. "I'm more concerned about impromptu riots, like those in response to the shortage of baby milk earlier in the year," says Mr Hellyer.

The success of Mr Sisi's reforms may depend on whether he can stand being less popular. Notoriously touchy, he may be tempted to backtrack if his ratings continue to decline. In the past he has reneged on cuts to fuel subsidies. About 60% of Egyptians say they would re-elect Mr Sisi if the vote were held now. That number, down from 80% over the summer, may be inflated due to a lack of alternatives. But having bought off the military and security services with generous pay rises, and with much of the media behind him, the president ought to feel secure enough in his job to push on with needed reforms. ■

Bowing to the inevitable

Egyptian pounds per \$, inverted scale



Source: Thomson Reuters

Islamic State in Syria

Anyone for Raqqa?

There is less to the offensive on Islamic State's capital than meets the eye

ON NOVEMBER 6th the Syrian Democratic Forces (SDF), a Kurdish-Arab militia, announced an offensive to eject Islamic State (IS) from its stronghold in the Syrian city of Raqqa. America's outgoing defence secretary, Ash Carter, welcomed the news. He is keen to give an impression of gathering momentum in the campaign to destroy the "caliphate" in Syria as well as in Iraq. Mr Carter described the operation to isolate and liberate Raqqa as the next stage in the coalition's campaign.

However, the attempted encirclement of Raqqa is not like the battle raging on the other side of the border, to retake Mosul, Iraq's second-biggest city. Now in its fourth week, that battle is hard-fought but going well. Clearing IS fighters from surrounding villages, stuffed with booby traps and linked by tunnels, is difficult, dangerous work. But Iraqi security forces, Kurdish Peshmerga and Shia militias, supported by coalition air strikes, are advancing on several axes. Some special force units have entered an eastern district of the city.

Mosul will surely be liberated sooner rather than later, although the cost in military and civilian lives may be high. But there is far less certainty about Raqqa. The Americans say the operation there has been launched both to disrupt IS plots against the West and to cut off an escape route for jihadists fleeing Mosul.

The American-backed SDF are a mainly Kurdish umbrella group that consists of about 20,000 YPG (People's Protection Units) fighters and around 10,000 Sunni Arabs. It is thought that 300 American military advisers are working alongside them and helping to co-ordinate coalition air strikes on IS targets as the SDF advance from their base in Tal Abyad, some 100km (60 miles) north of Raqqa.

However, while America considers the YPG its most capable ally on the ground in Syria, Turkey, a NATO member, sees it as being closely linked to the PKK (Kurdistan Workers' Party), a Turkish separatist group. Turkey is conducting a vicious counter-insurgency campaign against the PKK. The Turkish government is determined to prevent the YPG and its political arm, the PYD, from carving out a contiguous Kurdish homeland across Turkey's southern border with Syria. Consequently, Washington has reluctantly heeded Turkish demands not to provide the SDF with heavy weapons, such as artillery and anti-tank missiles, that would have boosted its firepower.

Tunisia's tourism

The Russians are coming

TUNIS

Relief from an unexpected source

"LAST year was especially difficult," says Sabri Belhaouane. The Russian-Tunisian tour guide is still reeling from two terrorist attacks in 2015. In March that year three gunmen murdered 22 people at a museum in Tunis; in June a lone shooter killed 38 people at a beach resort in Sousse. Most of the victims were tourists. A million people cancelled plans to visit Tunisia. Some 70 hotels closed and tourism revenues, which were 7% of GDP, dropped by almost half.

Tunisia's fledgling tourism industry seemed doomed. But then, the Russians showed up. By last month, just under 600,000 Russian tourists had visited Tunisia this year, mostly young families and retirees from outside Moscow and St Petersburg. That is a tenfold increase on last year. Historically, Tunisia has looked westward for its non-Arab tourists; first came the French, bolstered by a linguistic and cultural familiarity, then Brits, Spaniards, Italians, and Germans. But Western European travel warnings and cancellations by big tour operators have forced Tunisia to shift its orientation.

Tunisian tourism has been boosted by the Kremlin's decisions restricting travel to Egypt and Turkey, two destinations previously popular with sun-seeking Russians. In October 2015 a Russian passenger plane exploded over the Sinai Peninsula; Vladimir Putin issued an indefinite ban on all Russo-Egyptian air travel. A month later the Turkish Air Force shot down a Russian jet in Syria; charter flights and tour sales to Turkey were halted until this summer.

Tunisia is adapting to

the new Russians. It is now common to find menus in Cyrillic, and to see busloads of Russian tourists, sunburnt and in shorts, strolling up Avenue Bourguiba, the main thoroughfare in downtown Tunis. The National Office of Tunisian Tourism (ONTT) has a bureau in Moscow; they are thinking of expanding to St Petersburg. Language courses have begun for tourism workers in Djerba. Hotels, some accused of watering down beer, are learning to be less stingy with the drinks.

Visa-free travel and low prices help too, thanks to a weak dinar. Cheap all-inclusive package deals banish any thought of terrorism: "I don't know anything about that," Ludmila, a 70-year-old teacher visiting Sousse from Perm Krai, near the Ural Mountains, says with a flick of her hand. Like many Russian tourists, her main complaint is the rubbish in the streets. Mohamed Ali Toumi, president of the Federation of Tunisian Travel Agents, has a simpler explanation: "Russians," he says, "aren't so easily scared."



er. The Turkish president, Recep Tayyip Erdogan, claims that his forces, not the SDF, will liberate Raqqa.

The Americans are unconvinced. They are hoping to dissuade the Turks from sabotaging the SDF's advance on Raqqa. The Turkish plan would be to march through Tal Abyad, a border town, in an attempt to split the territory in Syria that Kurds currently control (and which Kurds hope will one day become a Kurdish statelet called Rojava), says Fabrice Balanche of the Washington Institute, a think-tank. To that end, General Joe Dunford, chairman of the joint chiefs of staff, visited Ankara, the Turkish capital, on the day the SDF offensive began.

In the unlikely event that the Turks can be kept on side, it still leaves the problem that there are not enough Arabs in the SDF to take and hold Raqqa, a mostly Arab city. But Mr Balanche believes that neither the Turks nor the SDF are primarily interested in taking Raqqa. Indeed, they are more likely to end up fighting each other.

Despite substantial progress in Iraq, America is still flailing around in Syria. Meanwhile, Russia is readying a new onslaught on eastern Aleppo. It appears timed to coincide with the arrival off Syria's coast of its elderly carrier, the *Admiral Kuznetsov*. And also to create facts on the ground that can sweeten any potential deal with Donald Trump. ■



Europe's alt-right

Wolves in skinny jeans

BERLIN

The “identitarian” movement puts a hipster mask on ultranationalist politics

TURN off the sound and you might be watching a video blog by a fixie-bike riding, avocado-munching hipster—an environmental campaigner or a music journalist, perhaps. But Martin Sellner is no liberal. The Vienna-based 27-year-old uses social media sites—YouTube, Facebook, Twitter, Instagram—to promote the “identitarian” movement of which he is a leader. The identitarians are Europe’s answer to the American “alt-right”, which helped carry Donald Trump to the White House.

What Germans call the *Identitäre Bewegung* (IB) first emerged in France in 2003. Boosted by the refugee crisis and Islamist terrorist attacks, it has spread across northern Europe in recent years. Its local groups all sport the same yellow-and-black websites and anti-migrant, anti-Muslim, anti-media messages. Like its transatlantic counterpart, the IB exercises an outsized influence in two ways. First, it connects the traditional far right to populist politicians on the national stage. Second, it helps both groups by repackaging their ideas for a younger audience.

Its professed mission is to preserve national differences. “Human rights include the right to a homeland” is a typical mantra. Where others see European nations as the products of centuries of exchange and interaction, identitarians idealise a mythical past in which borders were absolute and clear (even in Germany, where they have historically shifted as often as the gears on a BMW). Clear borders allowed

those inside them to establish religious and cultural norms, identitarians argue. They speak of a “great replacement” (of white Europeans by immigrants with higher birth rates), “ethno-pluralism” (which, confusingly, means something close to the opposite of “pluralism”) and the need for a “reconquista” (a reference to the Christian recapture of Spain from the Moors).

Mr Sellner cites Greenpeace as a model. Like that outfit, the “IBsters” deal in stunts and direct action. They have hung a banner reading “secure borders, secure future” from the Brandenburg Gate in Berlin, blocked roads in Calais to oppose a migrant camp, disrupted theatre perfor-

mances in Berlin and Vienna and occupied mosques in Leiden and Poitiers. They have smartphone-friendly websites and sell T-shirts and tote bags bearing their logo: the Greek letter lambda, which appeared on the shields of the Spartans who held off the Persians at the Battle of Thermopylae in 480BC. They also adore the local, rail against “McDonaldisation” and idealise the pastoral. A recent video by their Bavarian chapter shows rolling hills and sprightly young men boxing in woodland dells.

The movement has a deft way of making xenophobic causes seem palatable to moderates. Mr Sellner uses the Twitter hashtag #remigration to “encourage” African and Asian immigrants to reverse the brain drain by returning to their homelands. He frames insinuations that Muslim immigrants are chauvinists and rapists as a defence of women’s rights. An IB group in Paderborn, near Hanover, recently distributed cans of tear gas to female pedestrians; in the current political context, the message was clear: German women need protecting from those beastly foreigners.

This relative subtlety opens doors to respectable society that remain shut to the traditional skinhead right. The likes of Mr Sellner and Marion Maréchal-Le Pen, a leading French identitarian, are invited to speak by the mainstream media. They are thus useful to the anti-immigration parties advancing in much of the continent, like the Freedom Party of Austria (FPÖ) and the National Front (FN) in France. They promote (and sometimes provide) candidates for their parties and heckle their rivals. The politicians repay the favour. “I understand their concerns,” says Marine Le Pen, the FN leader (and Marion Maréchal’s aunt). Heinz-Christian Strache, the FPÖ leader, shares their videos and defended the Viennese theatre occupation. Local FN politicians have even hired identitarian activists as press advisers.

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Popular populists

Europe’s alt-right groups

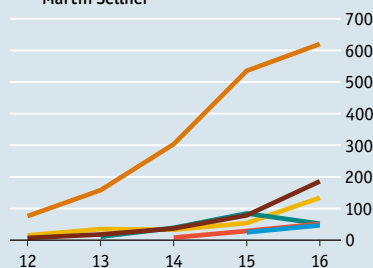
Yearly average of Facebook likes per post

Génération Identitaire: France Paris

Identitäre Bewegung: Austria Saxony

Identitair Verzet (Netherlands)

Martin Sellner



Sources: Facebook; The Economist

Germany's loony right

The Reich lives on

BERLIN

The Germans who think the Federal Republic is a hoax

MANY Germans assume that nowadays it is others, especially Americans, who are prone to conspiracy theories and the rantings of paranoid megalomaniacs. By contrast Germans, forever chastened by a Nazi past, are doomed to boring responsibility. This makes the exceptions all the more fascinating. One is the tiny but growing movement of "imperial citizens".

The so-called *Reichsbürger* are convinced that the Federal Republic of Germany (FRG) does not exist. In its place the old German Empire endures, which in their telling was never properly abolished and persists in the borders of either 1871 or 1937. There are nearly as many lines of pseudo-legal reasoning as adherents. One rests on the fact that the Allies never signed a peace treaty with Germany after the second world war. Another cites selectively from a decision by Germany's supreme court in 1973 regarding an agreement between West and East Germany. The upshot, say *Reichsbürger*, is that the Federal Republic is really a limited-liability company based in Frankfurt and controlled by a Jewish world government based in America.

To the *Reichsbürger* the FRG's police, judges, laws and tax agencies thus have no authority, and its documents carry no weight. At a traffic stop, say, a *Reichsbürger* will overwhelm the (usually puzzled) police with references to phony legal paragraphs and treaties while producing a driver's licence or other identification issued by the Empire. The insignia

vary because it is not clear even to the *Reichsbürger* who the true imperial government-in-waiting is. There are about 30 rival imperial chancellors, several princes and at least one king. One of the chancellors, a man named Norbert Schittke, also claims the English throne.

Though they draw ridicule even from neo-Nazis, the *Reichsbürger* are considered part of the extreme right. Many (though not all) are racist and anti-immigrant. Most are male and live in rural areas. Of the four regions that monitor their numbers, Brandenburg and Thuringia, both in eastern Germany, have the most, with several hundred identified in each. Worried about a rise in incidents, a think-tank in Brandenburg recently published a handbook for bureaucrats dealing with *Reichsbürger*.

The best approach, it advises, is to avoid responding at all. Typically, a *Reichsbürger* will only deluge a bureaucracy with verbose letters studded with obscure citations. Others get aggressive. Some 20 interrupted a trial this year and tried to "arrest" the judge. The first case of armed violence occurred in October. Wolfgang P., a hunter in Bavaria, had outed himself as a *Reichsbürger* in the course of disobeying local authorities. When officers approached his house to confiscate his rifles, he opened fire from the upper floor, injuring several and killing one. Locals told the press that the 49-year-old was a loner raised by his grandmother, whose death had apparently unhinged him.

Beyond all the mumbo-jumbo about "ethno-pluralism", the old racist tropes and practices are still there. In Germany identitarians describe immigration as "nation death"; in France they speak of "pure-blood Frenchmen". They have marched alongside skinheads at anti-Islam rallies in Dresden and put a chain-lock on a Muslim school in Rotterdam. In August Germany's constitutional watchdog put the IB under formal observation—hardly surprising, as the NPD, a German neo-Nazi party, has circulated the movement's videos as examples of good technique.

Pepe hops the pond

Compared with America's alt-right, identitarians are less web-centric—they tend to meet in person, in local groups—and less openly race-obsessed. But the affinities outnumber the differences. Breitbart, the American alt-right's favourite website, cov-

ers the IB in gushing tones and is planning to launch its own European division. Mr Sellner hosted a pro-Trump party in Vienna on the night of the American election.

This points to the movement's most curious trait. Its activists may preach love for the homeland and its unique character, but in practice they are impeccable internationalists, mixing and exchanging ideas like other millennials. Austria's identitarians borrowed their look wholesale from counterparts in France (as Mr Sellner, speaking good French, admits in one of his YouTube appearances). Alt-right activists on both sides of the Atlantic treat a cartoon frog, Pepe, as a sort of mascot. From Indianapolis to Innsbruck, they share the same open-source politics, fume over the same grievances and chortle over the same jokes. Their movement is a howl of anguish at the integration of different peoples. It also epitomises that process. ■



Polish paranoia

Tales from the crypt

WARSAW

Exhuming a president to prove a conspiracy

EVER since a plane carrying then-president Lech Kaczynski crashed near the Russian city of Smolensk on April 10th, 2010, killing all 96 people on board, Poland's Law and Justice party (PiS) has been consumed by conspiracy theories. Now in power, it is led by Jarosław Kaczyński, the late president's twin brother, who believes that Russia brought the plane down—perhaps with the connivance of PiS's Polish political enemies. So the government is having the bodies exhumed. An international team of experts will examine them for evidence of foul play. Many of the victims' families do not want their relatives dug up, but they have been told the choice is not theirs to make.

The move does not seem to be prompted by political need. PiS is very popular, largely because of its generous welfare policies, including a lavish monthly child benefit it introduced. According to the most recent poll, just 27% of Poles believe the conspiracy theories about the crash. But the Smolensk issue is important to PiS's core electorate, mostly older people outside the big cities.

Earlier this year Poland's defence minister, Antoni Macierewicz, who claims that the plane disintegrated before crashing, announced that a new investigation was being launched. Mr Kaczynski has repeatedly insinuated that his nemesis Donald Tusk, the former leader of the centrist Civic Platform (PO) party who was prime minister at the time, was somehow involved in the crash or in a subsequent cover-up. Mr ▶▶

► Tusk is now president of the European Council; last month Mr Kaczynski hinted that Warsaw may not back him for a second term in May.

Advocates of the exhumation point out that a fresh autopsy of Poland's wartime leader Wladyslaw Sikorski in 2008 debunked theories that he was assassinated. (One *Pis* MP noted that delayed autopsies are often useful, citing the archaeological examination of the Pharaoh Tutankhamun.) But just 10% of Poles support the exhumation. Relatives of some of the victims are aghast. Over 200 signed a letter opposing it. One widow expressed despair at having to see her husband's corpse dug up to prove "the existence of an attack that I do

not believe in".

The letter has had little effect. The sarcophagus of Lech Kaczynski and his wife Maria, buried in the crypt under the Wawel castle in Krakow, will probably be opened this month. More exhumations will follow. Meanwhile, a Polish feature film released this autumn, "Smolensk", depicts a sceptical journalist becoming convinced that the rumours are true. It includes footage of Mr Tusk deep in conversation with Vladimir Putin. At the premiere, Mr Kaczynski said the film "simply depicts the truth". It does not, but in a world where the boundaries between fact and fiction are increasingly ignored, that may not matter much. ■

Russia's Trump fans

Our American cousin

MOSCOW

Vladimir Putin welcomes Trump's win. Strangely, so do some of his opponents

Russian lawmakers burst into applause when news of Donald Trump's victory reached Moscow. The White House will be home to a candidate whose chumminess with Russia provoked one former CIA director to call him an "unwitting agent" of Vladimir Putin. Announcing Mr Trump's victory in the Kremlin's gilded ceremonial hall, Mr Putin said he welcomed the opportunity to "restore full-fledged relations with the United States". Russia's state-controlled media, which thrive on anti-American propaganda, could hardly hide their glee. "I want to ride around Moscow with an American flag in the window of the car," wrote Margarita Simonyan, the head

of RT, the state-backed network that actively promoted Mr Trump's candidacy.

Mr Trump's victory has been portrayed both inside and outside Russia as another example of Mr Putin's luck. The Russian leader views America's liberal democratic order, which encourages political and economic openness around the world, as a threat to his own system of closed governing networks dominated by the security services. An isolationist America bogged down in political infighting is much less of a threat to Mr Putin. Russian liberals are in despair; hardliners are cheering. Russia's neighbours are fretting about the withdrawal of Western backing to deter Rus-

sian aggression. Mr Putin is hoping for a deal with Mr Trump, similar to the 1945 Yalta agreement, to carve out a Russian sphere of influence.

Yet Mr Trump's victory may prove more problematic for the Kremlin than it seems. Mr Trump's friendly campaign rhetoric about Russia is no guarantee of co-operation. (Barack Obama also launched a reset of relations with Russia when he came into office.) Whereas Hillary Clinton offered a predictable, albeit hostile, line on Russia, Mr Trump is shrouded in uncertainty. "If America is the devil, better the devil we know," says Dmitri Trenin, director of the Moscow Carnegie Center, a think-tank.

Anti-Americanism is one of the pillars of the Kremlin's propaganda strategy, which portrays Russia as a besieged fortress. Mrs Clinton would have been an ideal enemy. With a friendlier President Trump in office, state television may have to fall back instead on lampooning American politics and Mr Trump himself. But while Mr Obama largely ignored Russia's often racist attacks on him, insulting Mr Trump is riskier: he may take it personally. More importantly, Mr Trump's victory—part of a global populist backlash against the political status quo—is an ominous sign for Mr Putin and his wealthy cronies, who have held power for more than 16 years. If Russians grow angry at their corrupt elite, there is only one target for their anger.

This may explain why two of Mr Putin's fiercest opponents are more sanguine about Mr Trump's victory. One is Mikheil Saakashvili, a former president of Georgia who fought a short war with Russia in 2008. The other is Alexei Navalny, an opposition leader and anti-corruption blogger who galvanised anti-Putin protests in Moscow in 2011-2012.

As political outsiders and proud nationalists who have campaigned against corruption and the political establishment, both Mr Saakashvili and Mr Navalny feel they have more in common with Mr Trump than Mr Putin does. "I don't believe this is a crisis of America or of Europe. It is simply a swing of the political pendulum, which is what happens in a democracy," says Mr Navalny. "I wish our politics could be as dynamic."

Mr Saakashvili was brought in by the new Ukrainian government as governor of Odessa in 2015, charged with stamping out corruption. He thinks Mr Trump's predecessors failed to stand up to Mr Putin and were repeatedly outmanoeuvred. Hillary Clinton, he argues, pushed for a reset of Russian-American relations after the war in Georgia in 2008, and opposed the Magnitsky Act, which punishes Russian officials accused of involvement in the death of Sergei Magnitsky, a lawyer, in 2009. The Obama administration pressured Ukraine not to confront Russia militarily in Crimea and refused to provide it with lethal weap- ►►



Matryoshka mates

ons, despite a 1994 pledge to uphold its territorial integrity.

Worse, says Mr Saakashvili, America has propped up Ukraine's oligarchic elite in the misplaced belief that they are necessary to block Russian interference. "[American officials] kept telling me, 'don't rock the boat', but the boat was sinking," says Mr Saakashvili. Earlier this week he resigned as governor, accusing his erstwhile ally, President Petro Poroshenko, of abet-

ting corruption. He also believes America's policy of encouraging Ukraine to reintegrate its separatist eastern provinces is ruinous. "The less America interferes in Ukraine at this point, the better," he says.

If Mr Saakashvili's and Mr Navalny's views of a Trump presidency seem overly optimistic, those of Russia's establishment probably are, too. Many Russians have been hoping for an American leader more like their own. They may regret it. ■



While you were watching Trump...

Turkey locks up dissidents

ISTANBUL

President Erdogan keeps on purging

THE police in Diyarbakir came for Ziya Pir and his colleagues from Turkey's pro-Kurdish Peoples' Democratic Party (HDP) on November 4th, in the black of night. Detained on vague terrorism charges, they were taken to a police station; Mr Pir and several others were then transferred to a courthouse. As dawn broke, a car bomb went off outside the police station, killing 11 people, mostly civilians. An offshoot of the outlawed Kurdistan Workers' Party (PKK) took credit. The attackers "must have known that there were people being detained inside the building," says Mr Pir. He and his colleagues narrowly escaped death at the hands of a group they are accused of supporting.

The HDP is the latest casualty of the snowballing purges ordered by Turkey's president, Recep Tayyip Erdogan, in the aftermath of the failed coup on July 15th. Over 36,000 people have been arrested and 100,000 sacked, most of them from state jobs. Mr Erdogan has imposed emergency rule and put Turkish politics in a

stranglehold. Ten HDP deputies, including its co-chairs Figen Yuksekdag and Selahattin Demirtas, a former candidate for president, have been arrested. Police have raided the party's Ankara headquarters. The HDP responded with a partial boycott of parliament.

Mr Erdogan is backed by a coalition of nationalists and Islamists, fired up by the summer's violence and by his own rhetoric. (To him, this coalition is synonymous with "the national will".) Politicians from the ruling Justice and Development (AK) party accuse Western critics of ignoring the trauma of the attempted coup on July 15th, which left some 270 people dead. They argue that if the junta, thought to answer to the widely reviled Gulenist sect, had wrested power from Mr Erdogan, it could have meant civil war.

Yet the damage inflicted on Turkish democracy by the purges has been appalling. Having locked up the HDP leadership, as well as more than 100 journalists, the government has begun to turn up the heat on

the main opposition, the secular Republican People's Party (CHP). Earlier this week, the party denounced the arrests of the Kurdish lawmakers, calling on its own supporters to "resist democratically". Mr Erdogan responded by lodging a criminal complaint against all of its MPs. Under emergency law, parliament has turned into a sideshow. To the dismay of AK's own dwindling moderate faction, Mr Erdogan is once again musing about reinstating capital punishment. A nationalist party wants the death penalty, and analysts fear that Mr Erdogan may back it if the nationalists support a new constitution that would give him further executive powers.

In theory, Turks will have their say on the constitutional changes in a referendum planned for the first half of 2017. Yet with the mainstream media cowed or co-opted, Kurdish politicians behind bars and dissent equated with treason, the prospect of a free and fair vote is abysmally low. A referendum held under the state of emergency, up for renewal in January, risks turning into a coronation.

As models for his executive presidency, Mr Erdogan's supporters cite France and America. Yet the more relevant models are Kazakhstan and Russia, with an added serving of political Islam. Mr Erdogan's inner circle sees Turkey as "a more non-aligned country, with no dues to pay, no burden to carry, and no club membership," says Yusuf Muftuoglu, a former presidential adviser. The question is how much further Turkey can go along the path to autocracy without provoking serious unrest.

Mr Erdogan may be tempted to push ahead with a complete purge of the opposition, says Ali Bayramoglu, a veteran commentator. But even with the backing of the Islamist and nationalist camps, that would be no walk in the park. In a society as polarised and diverse as Turkey's, the transition to absolute rule risks opening the door to social unrest. "Erdogan is a tactician; sometimes he knows very well when to stop," says a former CHP politician. While there may be more episodes of repression, "this cannot go on indefinitely."

If fear of civil unrest does not keep Mr Erdogan up at night, the sagging economy may. The government recently revised its 2016 growth forecast down to 3.2% from 4.5%. The lira has fallen to its lowest level against the dollar in over three decades. Unlike the autocratic regimes to its east, Turkey relies on credit, not oil or gas, to generate growth. "This country needs to attract money from abroad, to continue giving the image that it knows where it's going," says an economist. Further repression, and the ensuing instability, "cannot be sustainable".

Yet governments often do things that are not economically sustainable. Turkey's democracy is on life support. Mr Erdogan is holding the plug. ■

Charlemagne | When America sneezes...

Donald Trump's victory is more bad news for the European Union



WHAT lessons should Europe draw from Donald Trump's election victory? For those Europeans who believe in American exceptionalism, there may be little to learn. America's circus-like primaries and gladiatorial presidential contests find few echoes in Europe, and Mr Trump, in all his preening, soufflé-haired glory, is surely a *sui generis* American phenomenon. Moreover, the electoral college is a peculiar institution. Hillary Clinton seems to have won the popular vote, after all.

But for most European politicians the shock of the American election was compounded by the obvious parallels for their own democracies. Worried leaders tempered their letters of congratulation to Mr Trump with veiled reminders of the transatlantic values many of them believe his victory imperils. Meanwhile Europe's army of little Trumps, from France to Italy to Hungary, took their own lessons from the result, showering laudatory missives upon the president-elect that had little to do with America and everything to do with the messengers' own projects of political disruption: if it can happen there, why not here? The "aloof and sleazy establishment is being punished by voters step-by-step," said Heinz-Christian Strache of Austria's far-right Freedom Party (FPÖ) in his Facebook salute to Mr Trump.

Europe's ears have been ringing with wake-up calls for years. Like Tolstoy's unhappy families, each disaster is different in its own way: the euro crisis set creditor against debtor and tore at the notion of solidarity; Brexit showed that the European Union could shrink as well as grow. After so many traumas in recent years plenty of Europeans were at least braced for this one, even if a Trump presidency is hardly the sort of eventuality one can plan for. Its effects on the EU could, in time, prove profound.

The ascent to the White House of Mr Trump, an admirer of Vladimir Putin who hints that he may abandon America's NATO allies, poses urgent questions for Europe's security order. Weakening America's commitment to NATO could undermine the guarantee of peace that has allowed the EU to pursue its project of integration. But if Mr Trump's capriciousness makes the geopolitical effects of his presidency hard to predict, the hit to Europe's self-confidence, already sagging after a string of crises, will be immediate. For the EU is rapidly losing faith in its ability to defend the liberal ideals that Mr Trump's victory repudiates. So badly

has the mood soured that minor successes are now held up as political marvels: Donald Tusk, head of the European Council, heralded a recent trade deal with Canada as a triumph for Western democracy, after last-minute talks barely saved it from death at the hands of a restive regional parliament in Belgium.

But if Mr Trump's win is a threat to the EU, it will arrive first via the tribunes of national politics. Mr Strache and his ilk will take heart from the poll-defying victory of a man who shares their distaste for elites and their devotion to nation-first tub-thumping. They may even reap electoral rewards, although a short-term flight to political safety is another possibility: support for EU membership has shot up in most countries since Britain voted to leave in June. An early test will come with Austria's presidential run-off on December 4th, when the FPÖ's Norbert Hofer squares off against a candidate backed by the Greens.

Yet even outside government the populists can tug other politicians in their direction. By forcing centrists to tack towards the fringe, Mr Trump's victory may strengthen the trend towards Euroscepticism in countries like France and the Netherlands, both of which hold elections next year. (In Germany Angela Merkel, mercifully, is likely to show more backbone.) That in turn could gum up the workings of the EU, where compromises are essential to oiling a complex piece of machinery with 28 moving parts. Inside the EU the alternative to fudge is not frictionless decision-making, but gridlock and inertia. Eurocrats in Brussels often complain that they are made the scapegoats for the failings of national politicians. They should brace for more of it.

No appetite for destruction

For now, Mr Trump's win will merely deepen pro-Europeans' commitment to maintaining unity at all costs. Since Britain's referendum the remaining governments have been working on lowest-common-denominator projects like an EU border guard and military co-operation to show that they are still capable of getting things done. (Optimists hold that such efforts might actually be boosted by fears of a withdrawal of the American security umbrella.) Similarly, Mr Trump's win will if anything strengthen Europeans' resolve to take a tough line in the Brexit talks so that their own populists are not further emboldened.

But there will be casualties, too. First among them will surely be the Transatlantic Trade and Investment Partnership (TTIP), a proposed EU-US deal that was already floundering in the face of opposition in Europe and differences between the two sides. The trade-bashing Mr Trump is hardly going to ride to its rescue; if it dies, or (more likely) enters deep-freeze, so do Europe's hopes of directing global trade standards. Mr Trump has vowed to withdraw from the climate deal agreed last year in Paris, championed by the EU as a triumph of multilateral diplomacy. Forget about transatlantic co-operation on resettling Syrian refugees.

Yet the deeper fear for many Europeans is that their own long journey of integration is finally running out of steam. The EU is not on the verge of falling apart, Brexit notwithstanding. But Mr Trump's success shows the potential power of the backlash against the liberal norms the club is supposed to embody, from trade to migration to human rights. If it is replicated in Europe, the EU may eventually tilt towards a common assembly for mutually beneficial transactions rather than a club of like-minded countries with a sense of shared destiny. The tremors from America's political earthquake were felt across the continent this week. But Europe's edifice was already tottering. ■



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Brexit and Parliament

Questions of sovereignty

Behind the legal rows over the procedure for leaving the European Union lie deep differences over the right form of Brexit

JUDGES in Britain are not used to being pilloried. So the response to a High Court ruling on November 3rd that the government must have the approval of Parliament before initiating the Article 50 procedure for leaving the EU came as a shock. Several newspapers loudly denounced the judges for trying to subvert the referendum vote for Brexit on June 23rd. No matter that the judgment was not about whether Brexit should happen, but about the narrower question of whether the government could unilaterally invoke Article 50 using its prerogative powers to make and unmake treaties.

On this issue the judges were emphatic. Because the 1972 European Communities Act that gives effect to Britain's EU membership confers domestic rights on individuals, those rights can be removed only by Parliament. Yet the government still disputes this view. On November 7th David Davis, the Brexit secretary, confirmed in the House of Commons that the government would appeal to the Supreme Court. All 11 justices will hear the case in early December; they are expected to hand down their judgment only in January.

Most lawyers who have studied the High Court judgment expect the Supreme Court to concur with it. The only thing that might change this is if the court questions whether triggering Article 50 irrevocably leads to Brexit. In the High Court case, both sides assumed it would. Yet in Brussels

many lawyers believe that, even though Article 50 sets a two-year deadline for a country to leave, its invocation could in practice be withdrawn at any time. Such an argument could help the government to win in the Supreme Court. Yet it does not wish to use this line, because it dislikes any suggestion that Brexit could be reversible. Furthermore, were the case to turn on this issue it could lead to an embarrassing referral to the European Court of Justice.

What will happen next? The most likely outcome is delay, which may threaten the government's promise to trigger Article 50 by the end of March. If the government loses in the Supreme Court, it will surely have to introduce not a parliamentary resolution but a bill to be enacted by both houses of Parliament.

Most MPs and Lords backed the Remain side in the referendum. Even so, they are unlikely to block the invocation of Article 50. But they may try to attach conditions that the government dislikes, such as demands for more clarity over negotiating goals, a commitment to stay in the EU's single market, a special arrangement for devolved administrations (Scotland's government, particularly unhappy about Brexit, has said it may file a brief in the Supreme Court case) or a demand that an eventual Brexit deal must be approved by a further referendum.

Theresa May's government has a working Commons majority of only 14 seats

and no majority at all in the Lords. Yet it should eventually be able to secure a cleanish Article 50 act without many conditions. One tactic it is quietly using is to threaten its opponents that it might call an early general election, which opinion polls suggest could substantially increase its majority. Yet this would itself be a risky course—the pollsters can be wrong, as America found out this week—and would also delay the invoking of Article 50.

The more important debate over Britain's departure from the EU is about what sort of Brexit is most desirable and what is the best way to negotiate it. On both these questions Brexiteers are being deliberately—and perhaps dangerously—opaque. Thus many are claiming that Britons voted on June 23rd to leave the single market, to impose strict immigration controls and to stop sending any money to Brussels. Yet the question on the ballot paper was only about whether to leave the EU. A clear trade-off exists between the goals of maximising market access and adopting tougher controls on migration. Almost all economic analyses have found that the costs of Brexit to the economy will be far higher if unfettered access to the single market is lost.

The man without a plan

As for how to get the best deal, the government insists that to give more clarity over its objectives would be to tie its hands in Brussels. Mr Davis repeatedly told the Commons that, although he would be as open and transparent as he could be, he would reject demands to disclose the government's negotiating position. The suspicion must be that the government, riven by internal arguments, has actually not got any such position. But Mr Davis's argument is that, were it to set out minimum negotiating objectives, other EU govern- ►

ments would immediately make these the maximum that could be secured. One Tory MP likened demands for more parliamentary say to a poker game in which the government has to lay all its cards on the table.

Such analogies betray a fundamental misunderstanding of how EU negotiations work. It is true that the final details are often settled in the small hours and behind the closed doors of a European summit. But almost everything said and done in Brussels is immediately leaked. Moreover, the best outcome to any EU negotiation is, rather like international trade talks, not a zero-sum one in which one side must win and others lose: it is one in which all can see benefits.

In any case, before most crunch summits, national leaders (including British ones) have disclosed to their parliaments and their voters the broad outlines of what they hope to achieve. That is what Harold Wilson and David Cameron did in their attempted “renegotiations” of the terms of Britain’s membership. It is what Margaret Thatcher did in her battles over the EU budget in the 1980s. Other leaders act likewise. The Danish prime minister gets a mandate from the Folketing that he can depart from only by consulting it again. During the euro crisis, Germany’s Angela Merkel repeatedly had to secure the assent of the Bundestag for her decisions.

Mr Davis and his colleagues insist that more parliamentary say over Brexit would reduce the chances of a good deal. But experience in Brussels suggests the opposite: greater transparency and parliamentary guidance would strengthen not weaken Mrs May’s hand. By bolstering Parliament’s role, the judges may have nudged Britain towards a better Brexit. ■

India and Britain

A cooler climate

DELHI

The prime minister returns empty handed from her first long-haul jaunt

IN THE 1950s nearly half of India’s imports and 80% of its foreign investment came from Britain. Today Britain ranks 13th among India’s trading partners, accounting for 2% of its trade. British firms still have big investments in India, but now such brands as Jaguar Land Rover, Tetley’s tea and even the East India Company are Indian-owned. And it is now Delhi, India’s capital, that cooks up the thickest and smokiest of those fogs that London once made.

So Theresa May discovered as she arrived on November 6th, into a haze unusually acrid even for the world’s most polluted big city. The prime minister’s three-day



Subcontinental drift

visit, her first outside Europe, was meant to show that a post-Brexit Britain can prosper by reviving old friendships and cutting new deals. But even Delhi’s smog could not obscure some hard truths.

Mrs May had hoped to focus on trade and investment. The Indian ministers and businesspeople she met with, however, were fully aware that Britain will be in no position to negotiate significant bilateral deals until it has sorted out its disentanglement from the European Union.

India’s government, meanwhile, has shown scant interest in trade deals. Talks on a free-trade agreement with the EU that began in 2007 have been stalled since 2013. India last year shied away from joining the Trans-Pacific Partnership (which now itself looks doomed). And earlier this year Delhi told 57 countries that it wishes to scrap and renegotiate its bilateral investment-protection treaties with them. Its new “model” treaty would compel foreign investors to seek redress in India’s clogged courts before doing it via international arbitration.

Rather than freer trade with Britain, what Indian officials pressed for was greater freedom of movement. Small wonder. During Mrs May’s six-year tenure as home secretary, the number of Indian students in British universities plummeted from 68,000 to 12,000, largely due to her tightening of visa rules. To Mrs May’s discomfort those rules tightened further a few days before her visit. Foreign companies will now find it harder to bring over staff for short-term postings in their British subsidiaries; Indian tech firms had accounted for 90% of migrants in one of the affected categories.

“It seems that the UK is mainly interest-

ed in greater market access for its goods in India and in getting investments from India, but not in attracting talented Indian services professionals and students,” sniffed Nirmala Sitharaman, a minister with portfolios in trade and finance. Narendra Modi, India’s prime minister, was just as blunt. Education, he declared at a public meeting with Mrs May, would “define our engagement in a shared future.”

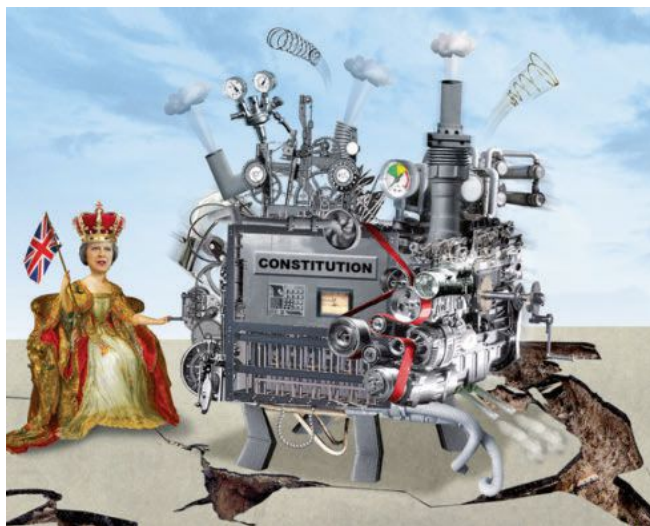
Given Mrs May’s promise to curtail immigration even further, the British team could not offer much on this score. She did pledge shorter queues for Indian frequent flyers to Britain. They can now hope to join the “Great Club”, an invitation-only portal which, Mrs May said, will provide lucky executives and their families “a world-class visa service tailored to their needs”. Any further easing of visa rules, she warned, would hinge on India’s willingness to take in more of the people that Britain wants to expel from its shores.

This prompted one Indian wit to tweet: “This is funny. Theresa May wants India to ‘take back’ Indians who overstayed but won’t extradite Vijay Mallya who has no passport.” The reference was to a prominent Indian businessman who took refuge in London earlier this year as Indian creditors demanded repayment of more than \$1bn. Britain says India has yet to present extraditable charges against Mr Mallya.

The air cleared as Mrs May headed to Bangalore, India’s tech capital, for visits to a factory and to a Hindu temple, clad in diaphanous Indian national dress. “She carried her sari remarkably well,” says one fashion critic in Delhi. Yet the promises of future co-operation were just as thin. ■

Bagehot | The machine splutters

Unsexy as it may seem, Britain needs a big constitutional debate



THE executioner's axe sailed through the January chill, the pointy-bearded head thudded into the basket and the crowd let out a moan. Spectators in Whitehall rushed to dip their handkerchiefs in Charles I's blood (in 2008 one would materialise at a genteel auction in Gloucestershire). On this final tableau of the English civil war, Parliament having vanquished the autocratic monarchy, were sketched the principles by which power in Britain is exercised today: Parliament is sovereign and the executive's latitude—known as the “royal prerogative”—has limits.

It was a struggle over where these limits lie that recently saw Theresa May improbably accused of a bid to “reverse the result of the English civil war”. The prime minister wields the royal prerogative in the monarch's name and wants to invoke Article 50 of the EU treaty, the legal route to Brexit, without consulting Parliament. But the High Court ruled against her and she announced her intention to appeal. Geoffrey Robertson, a human-rights lawyer, accused her of “claiming the power of the Crown could override the will of Parliament”. “If the prime minister [is] so ignorant of the constitution's obvious requirements then it's certainly time to write it down,” he kvetched.

Britons should get used to this sort of squabble. Instead of a codified constitution, the country has a series of laws and documents—the oldest being the Magna Carta of 1215—that together convey its traditions and conventions. This slowly evolving body of principles tends to mean good, flexible government. Yet the process of leaving the EU will put it under severe strain.

Britain's unwritten constitution requires three conditions that have broadly prevailed since the 17th century. First: a consensus among the country's rulers about certain enduring traditions. Second: a population willing to defer to that elite's application and interpretation of those traditions. Third: a steady, incremental evolution of those traditions rather than sudden, violent shocks (or as Vernon Bogdanor, a constitutional expert, describes them, constitutional moments). Each of these conditions was slipping even before the referendum. The past two decades have brought more constitutional changes—from devolution to human-rights laws—than the previous couple of centuries. Battles over conventions like the royal prerogative have raged. Voters have become less willing to give elites the benefit of the doubt.

Brexit accelerates all of these trends, as the conflict over Article 50 illustrates. Witness Mrs May's determination to take on the judges, the vitriol poured on them by newspapers, the battles over whether the House of Lords has a right to block the legislation, the McCarthyite menace looming over every MP tempted to vote against it and the Scottish government's announcement, on November 8th, that it plans to intervene in the legal case.

And this is just the start of it. Once Brexit negotiations begin, the cabinet, MPs, devolved legislatures, the House of Lords and sometimes the judiciary will find themselves in multi-dimensional tugs-of-war. Who, for example, should scrutinise all the legislation returning from Brussels to British statute books? Should those powers revert to the national level, or be devolved further down? Should Edinburgh, Cardiff and Belfast have the right to veto any final deal? Can MPs reasonably do so? What about the mayor of London, or the new regional city mayoralties? How can the competing interests and outlooks on Brexit of diverging regions be accommodated?

Then there are the tensions generated by the very fact of the Brexit vote. Not unlike Donald Trump's victory four months later, the result spoke of social disparities, of a powerlessness felt by many and a disdain for aloof elites in a seemingly distant capital city. These pathologies militate for decentralisation, reforms to the cronyish House of Lords and a more responsive electoral system. Over half of voters live in safe seats and many are barely represented (under proportional representation the UK Independence Party would have won 83 seats in Parliament last year. Under first-past-the-post it won one). That Scotland and Northern Ireland voted to stay in the EU could bring further turmoil there as voters are dragged out of the club by their English and Welsh neighbours. Nicola Sturgeon, the Scottish first minister, has already published a draft bill for a new independence referendum. A move to a formal federal structure is probably the only long-term way to hold the United Kingdom together.

There is little appetite for a disruptive spasm of constitutional *perestroika* during the current, volatile period. And there is much to admire in the organic, scruffy, reasonable character of British democracy, reliably bending to social and political gusts like a lithe sapling in a storm. Walter Bagehot, the Victorian editor of this newspaper after whom this column is named, mocked the American notion that “the limited clauses of an old state-paper can provide for all coming cases, and forever regulate the future.” Moreover, the constitutional convention advocated by the likes of Gordon Brown, a former prime minister, sounds suspiciously like a political nerd-fest impenetrable to normal voters.

We the people

Yet there may be no alternative. Britain's unwritten constitution runs on deference to steadily accumulated precedent. Brexit will create rifts and ambiguities for which no clear precedent exists, and such a volume and tangle of them that attempting to “muddle through”—that is, botch together case-by-case settlements—could result in paralysis or disintegration. Better, surely, to confront all the interlocking quandaries in one big public discussion leading to reforms and perhaps a written constitution. They say Britain avoided the “constitutional moments” of continental Europe and America because it experienced no post-Enlightenment revolution (Charles I lost his head in 1649). But Britain may now be approaching such a moment whether it likes it or not. Brexit was that overdue revolution. ■



American business

Meet the new boss

NEW YORK

Businesses may come to love or to fear Donald Trump. Either way, they will have to make a deal

ALTHOUGH he styles himself as a chief executive who can turn the country around, Donald Trump is an outsider in the world of American business. His commercial operation is tiny by the standards of the country's mega-firms and few of their bosses have ever viewed the president-elect as an equal or ally. He has "no friends" among the business elite, sniffed a private-equity baron a few weeks ago, who will doubtless now join a queue of executives waiting at Trump Tower to curry favour and to assess the new man's priorities before he assumes office.

Those supplicants will soon discover that Mr Trump's attitude towards business has three contradictory strands. He is passionate about unleashing the might of the private sector in order to revive growth. There is certainly plenty of scope: last year listed American companies invested a mediocre 46% of their total cashflow. Yet he is also a populist who thinks the economy is rigged in favour of big business and crony capitalists, and he is a protectionist. In the coming months these three different strands will respectively excite, worry and scare the business world.

Start, first, with the things firms will like. Mr Trump's tax plans have been ridiculed by economists but their broad thrust will be wildly popular with companies. He has said he wants to slash the headline corporate-tax rate from about 40% to 20% or less, at the same time as removing a myriad of exemptions that allow businesses to

dodge their bills. Mr Trump also wants to make it possible for companies to bring home the \$2trn or so of accumulated profits they have stashed abroad, without triggering a huge tax bill in America. An amnesty, or a big reduction of the rate paid, will prompt companies to repatriate a wall of cash, although whether they will invest it or spend it on buying back shares remains to be seen.

Mr Trump's proposed war on red tape will also be popular. He was cheered by an audience of business bigwigs in New York when he spoke on the theme in September. By repealing Barack Obama's Affordable Care Act, he may help small firms who complain they are swamped by bureaucratic requirements. And if he succeeds in kneecapping the country's envi-

ronmental regulators, that should mean more lenient treatment of carbon-intensive industries including oil, gas and coal. On November 9th the share price of Peabody Energy, a coal firm that is trying to emerge from Chapter 11 bankruptcy, surged by almost 50%. Mr Trump's energy secretary could well be Harold Hamm, a pioneer of the hydraulic-fracking industry in North Dakota and elsewhere.

An infrastructure-spending boom will go down well with business, too. All firms complain about America's crumbling roads and late-Brezhnev-era airports. And the construction industry could earn windfall profits—one reason why an index of shares of companies in the sector rose by 9% the day after the election.

Tax, lies and red tape

If tax cuts, deregulation and new infrastructure are things that firms of all sizes will cheer about, big companies will worry about the second factor: Mr Trump's populist suggestion that the economy is rigged against consumers and ordinary workers. Had she won, Hillary Clinton would have been widely expected to reinforce America's antitrust apparatus in response to mounting evidence that competition has waned across the economy and incumbent firms have got too powerful.

Mr Trump's signals on this have been mixed. In October he objected to AT&T's \$109bn bid for Time Warner, a media firm, which he says will lead to a concentration of corporate power. But he has taken a softer line on the pharmaceutical industry's high prices for drugs, and share prices in the sector rose on news of his victory, having been pummelled by expectations that Mrs Clinton would rein in pricing.

Policies that boost competition and attack cronyism make sense, but the risk is that under Mr Trump they spiral into a nastier, populist confrontation with big busi- ▶▶

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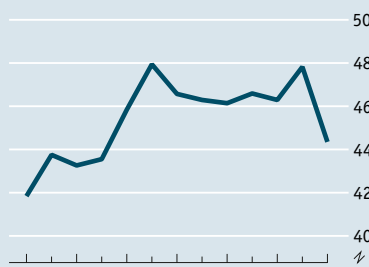
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Economist.com/business-finance**Homeward bound**

S&P 500, revenues from abroad, as % of total



Source: S&P Global

ness. That is a particular vulnerability for the two great power centres of the American economy, Wall Street and Silicon Valley. Mr Trump wants to repeal the Dodd-Frank Act, a clumsy law passed after the global financial crisis of 2008, aimed at re-regulating banks. Bankers despise it. But he has also proposed separating investment banking from commercial and retail banking, which would be a nightmare for universal banks such as JPMorgan Chase, which have spent miserable years adapting to today's rules.

Silicon Valley is also a potential flashpoint. Big platform companies such as

Facebook and Google are powerful, verging on arrogant, and they have been openly hostile to Mr Trump. So far he has taken aim at what he called the "monopolistic tendencies" of Amazon, an e-commerce company. It is also easy to imagine him objecting to Uber's treatment of its drivers, or forcing Apple to unlock customers' iPhones on grounds of national security. Then the technology industry's disruptive, liberal vision of America would be primed to clash with Mr Trump's more nativist one (see box).

However, it is the third strand of Mr Trump's ideas on business, his protection-

ism, that is most clearly bad for business. Since Mr Trump struck his very first big deal in Manhattan back in the mid-1970s, building the Hyatt Hotel at Grand Central Terminal, corporate America has ventured ever farther afield: 44% of the sales of the S&P 500 index of big companies are now earned abroad (see chart on previous page). Global firms will come under pressure to locate more production at home. During the campaign Mr Trump lambasted Ford and Mondelez, a food firm, for employing too few people in America. Trade wars and rising tariffs could severely disrupt supply chains: the American car industry relies heavily on component suppliers in Mexico. And if America imposes tariffs on Chinese imports, as Mr Trump has said it will under his leadership, an obvious and logical response from China could be to clamp down on the activities of American multinationals in a country where they reap sales of \$300bn a year.

Plenty of American chief executives will tell themselves that Mr Trump, whatever his other manifest flaws, understands business. That is true: he has a far more instinctive feel for companies and capitalism than does Mr Obama, or Mrs Clinton. But partly as a result, he is also an interventionist. He believes that American business can be an instrument of his power, to be bought, bullied and remoulded in order to achieve a national revival. His first career, as a self-styled tycoon, made little mark on corporate America. In his second, as a politician, his impact could be profound. ■

Volkswagen

A long road to recovery

The carmaker's efforts to move on from its emissions scandal are thwarted

THERE are two ways of dealing with a worrying problem in a car engine. One is a complete overhaul; the other is to tinker under the bonnet and hope the trouble goes away. Volkswagen's efforts to deal with an emissions-cheating scandal that emerged in September 2015 are of the tinkering type. The German carmaker is desperate to draw a line under its ill-fated decision to fit software to 11m diesel cars that detected emissions tests and artificially reduced the amount of nitrogen oxide pumped out. But the disconcerting rumbles continue.

The latest setback came on November 6th, when VW said that a German investigation of market manipulation was examining the role of Hans Dieter Pötsch, chairman of its supervisory board. The probe, which began in June, is looking at whether ►►

Trump and tech

System crash

Silicon Valley is right to be worried about a Trump presidency, but it helped get him elected

"I'D LIKE to wake up now please," tweeted Sam Altman, who heads y Combinator, Silicon Valley's foremost startup school. The sentence neatly encapsulates the mood in the high-tech hub. To many in the technology industry, America under Donald Trump means dystopia. Perhaps no other sector regards his victory with less enthusiasm.

The main reason is that his stated views are antithetical to the beliefs that most entrepreneurs and tech types hold on a range of topics from trade to offshoring to policy on immigration. By one estimate the tech industry gave nearly \$8m to Hillary Clinton's campaign. Silicon Valley also worries that it will lose its direct lines to the administration in Washington. According to the Campaign for Accountability, a transparency group, no fewer than 22 former White House officials have gone to work for Google since Barack Obama moved in. Under

Mrs Clinton the door would have kept revolving.

Only one noted Valleyite is likely to have the president's ear: Peter Thiel, a venture capitalist. He alone supported Mr Trump, speaking at the Republican convention and donating \$1.25m to his campaign. He will now be in high demand to help with damage control for the industry.

Mr Trump may limit immigration of the skilled workers and assorted entrepreneurs upon which the tech business relies. He has criticised Apple for having its iPhones assembled in China. He has also lambasted the smartphone-maker for not helping the FBI to crack a device belonging to a terrorist, which suggests he may push for "backdoors" in encryption software for governments to access. And he may go after big tech firms on antitrust grounds (of Amazon, for example, he has said, "If I become president, oh do they have problems"). But if Mr Trump cuts the tax rate firms have to pay if they bring home earnings kept abroad, that would especially benefit tech giants, who sit on much of the more than \$2.5trn stashed overseas.

His victory also offers an opportunity for introspection. Silicon Valley treated Mr Thiel shabbily: some called on Facebook to eject him from its board. The industry also indirectly added to populist fury. Its own firms have not created enough well-paid jobs and its algorithms have ushered in an age of anxiety about many more being automated away. And it does nothing to ease resentment of elites. Last year tech firms handed out more stock-based compensation than Wall Street paid in bonuses, and the streets of San Francisco are a Trumpian brew of some of America's most expensive property and soaring homelessness.



The world according to Thiel

▶ Martin Winterkorn, vw's former chief executive, and Herbert Diess, who oversees the core vw brand, should have disclosed the emissions cheating before the company publicly admitted wrongdoing. This is deeply uncomfortable for both vw and Mr Pötsch, who used to be the chief financial officer and was nominated to become chairman on the day the crisis began. It is also a reminder that questions linger about who at the firm knew what.

Adding to vw's woes, a German newspaper reported on the same day that American regulators had found that another variety of cheating software, which artificially lowered emissions of carbon dioxide, was still being fitted to several models of Audi luxury cars until May 2016. This may expose vw to further compensation, fines and legal entanglements.

The share price has fallen by 24% since the scandal broke, and vw has had to set aside €18.2bn (\$19.9bn) to cover the cost of compensating owners and fixing affected cars. Yet the damage is less than many people expected. The impact on the company's reputation with car-buyers has been less severe than predicted: sales and profits have stayed strong.

But vw now badly needs to put the diesel affair firmly behind it. Coping with the storm has claimed management resources that should have been dedicated to the urgent task of improving the performance of the mass-market vw brand, says Patrick Hummel of UBS, a bank. The costs of making cars bearing the core brand (as opposed to those at Skoda, SEAT and other marques) are sky-high, partly because vw makes so much in Germany, and profit margins are slender.

Investors will surely look more kindly on vw when all the risks, including those at Audi, are plain, and they can better gauge the likely financial consequences. But that will take a while. Despite agreeing on fixes and compensation deals in America, and pledging to rectify vehicles in Europe, vw still has to satisfy American authorities that it will do the same for larger diesel engines that were also affected. It must also resolve the matter of criminal fines in America and fight a lawsuit brought by disgruntled shareholders in Germany.

Meanwhile many in the car industry are questioning whether vw is letting its crisis go to waste by mostly carrying on as normal, without making radical changes to its culture. Matthias Müller, the current chief executive, is giving local managers more leeway to tweak car designs and other product features: that is a good thing, according to Citigroup, another bank. This sort of freedom would have been unthinkable under Mr Winterkorn but is essential in a business where tastes vary so widely in different markets. But Mr Müller's commitment to making the savings that vw

needs is unclear. Granted, in a few weeks he will conclude a "future pact" with workers at the carmaker's core brand. It will govern cuts in costs, employees' productivity and overall strategy. However, few expect it to go far enough.

If it does fall short, that will be partly because Mr Müller is a long-serving insider picked by the Porsche and Piëch families, who control over half of vw's voting

shares. Even if the families had been bold enough to bring in someone from outside, minded to act more decisively, such a boss would have met resistance from trade unions and from the state of Lower Saxony, where vw is based and which has a 20% stake in the company. Both wield much influence on its powerful supervisory board. In time, the failure to rebuild thoroughly may come to be seen as a mistake. ■



BAE Systems

Fighting fit

Geopolitical tensions bode well for the defence firm's profits under a new boss

CONTROVERSY over the relationship between BAE Systems, Europe's largest defence company, and one of its main customers, Saudi Arabia, was raging when Ian King, its chief executive, started his job in 2008. BAE's link to Saudi Arabia was forged 30 years ago with the first "al-Yamamah" arms deal. It saved the firm amid a difficult business environment, but embroiled it in a long-running corruption scandal that even led to Mr King's immediate predecessor, Mike Turner, being briefly detained by America's Department of Justice just before he stepped down.

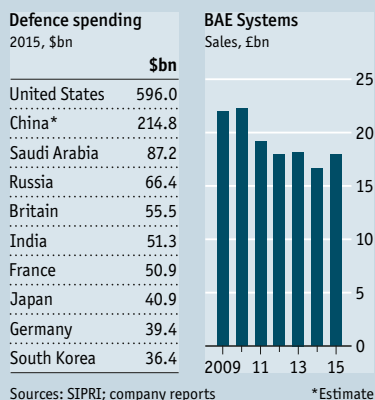
The new boss's mandate eight years ago was to banish BAE's old, buccaneering ways and make it the acme of squeaky-clean corporate governance. Now, as Mr King prepares to leave and hand over to a successor, the firm is once again under fire for its ties to the house of Saud, this time for supplying its wares to support the kingdom's war in neighbouring Yemen. A rising chorus accuses the Saudi-led coalition

of using its Western-supplied and maintained air power indiscriminately in its campaign against Iranian-backed Houthi rebels.

Human-rights activists are trying to use Britain's ratification of the multilateral Arms Trade Treaty in 2014 as a legal tool against the government and BAE. They have won a High Court judicial review into the use of British-made weapons in the Yemen conflict, but since the coalition's intervention has legal backing from the UN and is supported by the British government, the most the court can do is to order the government to look again at whether Britain is meeting its treaty obligations. Nevertheless, if it did, BAE would find itself in an uncomfortable spot.

If any of this bothers Mr King, he is not letting on. He simply asks if there is any sign of the British government wanting to weaken a vital strategic and commercial partnership. The Saudis and their allies in the Gulf have been good customers even ▶▶

Magic bullets



▶ as Western defence spending has fallen in recent years, particularly in BAE's core American and British markets. Mr King has had to keep tight discipline over costs and compete hard for sales elsewhere.

Now the outlook is improving for defence companies. Not only is there turmoil in the Middle East: Russia and China are challenging the West, bolstering their military capabilities and bullying neighbours. Defence spending in America, where BAE is treated as an indigenous contractor, is about to enter a new growth cycle as budgetary caps are relaxed and old kit is replaced. Donald Trump has committed himself both to increasing the Pentagon's budget and forcing allies to help pay for it. In Britain, the government has pledged to meet NATO's target of spending 2% of GDP on defence. The government also plans a far-ranging re-equipment programme, and BAE is well placed to win a long-term support contract for the two aircraft-carriers it is building. The firm is also to supply the Royal Navy with a family of frigates. Other international customers, such as India, are also adding to sales.

Yet there is little likelihood that Saudi Arabia and its Gulf allies will become any less important for BAE. Nearly 6,000 of its employees work in Saudi Arabia and the business contributes over a fifth of revenues. In the next few weeks, BAE and the Saudis are expected to sign a five-year extension of their long-term support and maintenance agreement. It will be worth about £7bn (\$8.7bn) and is linked to a deal to sell another 48 Typhoon multi-role combat aircraft valued at over £4bn. The Saudis are also expanding their navy: orders for just the first phase are valued at around \$25bn, and BAE is in a good position to win some of it.

Mr King's probable successor, Charles Woodburn, is a British oil executive brought in earlier this year as heir apparent. Thanks to the Saudi connection and recovering Western defence markets, he will inherit a bulging order book. But what has been missing for a while is growth. It will

Taxis take on Uber

African potholes

JOHANNESBURG

The ride-hailing startup faces a bumpy ride

"I WAS lucky my customers were three big white guys," says Themba, an Uber driver in Johannesburg recounting a close call with taxi-drivers who tried to block him from collecting passengers at the airport that serves South Africa's economic hub. "They pushed them out the way and we managed to drive off."

The ride-hailing app has made a splashy if slow start in Africa. Of the 529 cities in which Uber connects riders with drivers, just 14 are on the continent. Yet Africa is fertile ground for a firm offering cheap and safe transport. Most passengers have to spring for overpriced cabs or catch a white-knuckled ride on the back of a motorcycle taxi.

In Abuja, locals have long used a low-tech version of ride-sharing. Many folk simply stick out a hand at the roadside to hail any passing car before negotiating a fare. Yet locals warn that fake taxis cruise the streets with robbers hiding in the boot, ready to jump out at a traffic light. In Lagos some taxi-drivers are even thought to be in cahoots with kidnappers. Not surprisingly, Uber seems to be growing quickly in the few cities where it has launched. In many places rides cost less than a quarter of the fare charged by taxis. And it is adapting to local markets too. In cities such as Nairobi, where few have credit cards, customers can choose to pay for rides using mobile money on their phones, or in cash.

Yet the firm is also facing some pot-

holes quite unlike the regulatory barriers erected elsewhere in the world (such as, in Paris and Frankfurt, rules that stop it using unlicensed drivers). Instead of lobbying the government or going to the courts, taxi-drivers in some African cities have taken matters into their own hands.

At the airport and main railway stations in Johannesburg cabbies crowd around commuters, looking intently at their smartphones before trying to manhandle those who seem to be getting into Uber cars. Shots have been fired in some of these clashes. In Cape Town and Nairobi, Uber cars have been torched and their drivers attacked. The firm has responded by hiring burly security guards to watch over the main flashpoints in Johannesburg and is testing a panic button that calls armed guards.

Yet Uber also seems to be having some success in winning over taxi-drivers, mainly by signing them up. In Accra many Uber drivers are also old-fashioned cabbies who have chosen to venture into online ride-hailing. Petrus, an Uber driver in Johannesburg, says he joined the firm three months ago after working for many years behind the wheel of a taxi. "Those who are remaining [as taxi-drivers] are losing hope," he says. "Lots of their friends are joining Uber." Having as many as possible in the drivers' seats is certainly preferable to having them pelting stones from the side of the road.

be Mr Woodburn's task to change this by winning orders in new markets—particularly Asia, where BAE has sometimes struggled to compete in the face of American political clout. It will not be easy. Mr King may not be the most charismatic of leaders, but he knows the industry backwards and has shown a steely nerve at important moments. Mr Woodburn is very much the pick of the chairman, Sir Roger Carr, who seems keen on having a fresh pair of eyes to look at BAE's business. That may be a good call, but in an industry dominated by lifers it is also something of a gamble.

Apart from Saudi Arabia, the twin jewels in BAE's crown are a work-share agreement with America's Lockheed Martin on its F-35 stealth fighter, and its own Electronic Systems unit, based in New Hampshire, which, among other things, will supply the F-35's electronic-warfare suite. Under the Lockheed Martin deal, BAE is the only partner involved at "level one", or the closest level of collaboration. The British firm

has 15% of the airframe work and is responsible for making the aft fuselage and tail fins. The F-35 programme will be the cornerstone of Western air forces for at least the next 25 years. More than 3,000 F-35s, in three variants, are likely to be sold, which will add handsomely to BAE's profits.

The third offset

But there are clouds on the horizon too. A lack of research-and-development funding from the British government—which devotes 4% of defence spending to R&D, compared with nearly 12% of the Pentagon's (much bigger) budget—is a long-term problem for the company, says Ben Moores, an aerospace analyst with IHS Jane's, a defence publication. That partly explains the lack of an unmanned combat aircraft platform in BAE's portfolio. Although the British and French governments earlier this year committed about \$2bn to get a programme going, little has been decided.

For BAE the lack of government R&D ▶▶

could in the long run hinder its ability to supply programmes that are driven by America's "third offset" strategy—an attempt to combine a mix of cutting-edge technologies as a way to counter the erosion of Western military superiority as China and other countries ramp up their military strength. BAE is also constrained by the need to maintain dividends and continue plugging holes in its pension fund to the tune of more than £300m a year. Britain's Trident submarine-replacement programme is a big ticket contract, worth over £20bn, but margins are expected to be slim: the firm sees building the four new subs more as a patriotic duty than as profitable business.

Finally, there is, as always with BAE, Saudi Arabia. The ambitious economic reform plans of the deputy crown prince, Mohammad bin Salman, laid out in detail in June, are designed to prepare the country for a post-oil future. The plan involves creating hundreds of thousands of new technology and engineering jobs for Saudi nationals. This so-called Saudisation will require BAE to replace many of its British expatriate workers with locals. It is a change that will be both tricky to manage and costly. Nor can political risk in the kingdom ever be ignored. BAE reaps a huge reward from operating in such an unstable region, but that instability could one day show itself to be a double-edged sword. ■

Courier firms

The big sort

SHENZHEN

China's express-delivery sector needs consolidation and modernisation

“THE vultures all start circling, they're whispering, 'You're out of time'...but I still rise!” Those lyrics, from a song by Katy Perry, an American pop star, sounded often at Hillary Clinton's campaign rallies but will shortly ring out over a less serious event: a late-night party in Shenzhen to kick off “Singles' Day”, an online shopping extravaganza that takes place in China on November 11th every year.

The event was not dreamt up by Alibaba, but the e-commerce giant dominates it. Shoppers spent \$14.3bn through its portals during last year's event. That figure, a rise of 60% on a year earlier, was over double the sales racked up on America's two main retail dates, Black Friday and Cyber Monday, put together. Chinese consumers are still confident, so sales on this Singles' Day should again break records.

It points to an intriguing question: how will all of those purchases get to consumers? Around 540m delivery orders were generated during the 24-hour spree last year. That is nearly ten times the average daily volume, but even a slow shopping day in China generates an enormous number. By the reckoning of the State Post Bureau, 21bn parcels were delivered during the first three quarters of this year.

The country's express-delivery sector, accordingly, is doing well. In spite of a cooling economy, revenues rose by 43% year on year in the first eight months of 2016, to 234bn yuan (\$36bn). And although the state's grip on China's economy is tightening, the private sector's share of this market is actually growing. The state-run postal carrier once had a monopoly on all post and parcels. Now far more parcels are de-

livered than letters, and the share of the market that is commanded by the country's private express-delivery firms far exceeds that of Express Mail Service, the state-owned courier.

China's very biggest couriers have been rushing to go public on the back of the strong growth. Most of them started life as scrappy startups, and are privately held. But because of regulatory delays, which mean a big backlog of initial public offerings, many companies have resorted to other means. Last month, two of them, YTO Express and STO Express, used “reverse mergers”, in which a private company goes public by combining with a listed shell company, to list on local exchanges. In what looks to be the largest public flotation in America so far this year, another, ZTO Express, raised \$1.4bn in New York on October 27th. Yet another, SF Express, China's biggest courier, recently won approval to use a reverse merger too.

But investors could be in for a rocky ride. Shares in ZTO, for example, have plunged sharply since its flotation. That is because the breakneck growth of courier companies masks structural problems. For now, the industry is highly fragmented, with some 8,000 domestic competitors, and it is inefficient.

One reason is that regulation, inspired by a sort of regional protectionism, obliges delivery firms to maintain multiple local licences and offices. Cargoes are unpacked and repacked numerous times as they cross the country to satisfy local regulations. Firms therefore find it hard to build up national networks with scale and pricing power. All the competition has led to

prices falling by over a third since 2011. The average freight rate for two-day ground delivery between distant cities in America is roughly \$15 per kg, whereas in China it is a measly 60 cents, according to research by Peter Fuhrman of China First Capital, an advisory firm.

A handful of the biggest companies now aim to modernise the industry. Some are spending on advanced technology: SF Express's new package-handling hub in Shanghai is thought to have greatly increased efficiency by replacing labour with expensive European sorting equipment. A semi-automated warehouse in nearby Suzhou run by Alog, a smaller courier in which Alibaba has a stake, seems behind by comparison but in fact Alog is a partner in Alibaba's logistics coalition, which is known as Cainiao. The e-commerce firm has helped member companies to co-ordinate routes and to improve efficiency through big data.

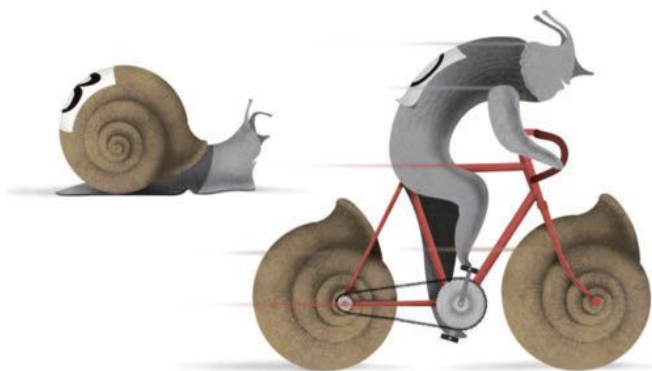
Other investments are also under way. Yu Weijiao, the chairman of YTO, recalls visiting FedEx, a giant American courier, in Memphis at its so-called “aerotropolis” (an urban centre around an airport) in 2007. He was awed by the firm's embrace of advanced technology. He returned to China and sought advice from IBM on how his company could follow suit. YTO is using the proceeds of its recent reverse merger to expand its fleet of aircraft, buy automatic parcel-sorting kit and introduce heavy-logistics capabilities for packages over 50kg.

There is as yet little sign that China's regions will begin allowing packages to move freely, so regulation will remain a brake on the industry. More ominously, labour costs are rising. There are fewer migrant labourers today who are willing to work for a pittance delivering parcels. This week *China Daily*, a state-owned newspaper, reported that ahead of Singles' Day, courier firms were offering salaries on the level of university graduates. ■



Schumpeter | The great divergence

A group of elite firms has established a sustained lead. This is not a good thing



ONE of Joseph Schumpeter's best-known observations was that successful businesses stand on ground that is "crumbling beneath their feet". A danger is that standing still and resting on your laurels can precipitate a swift tumble. Rivals, meanwhile, can draw on the available stock of knowledge and technology to catch up with the leaders. To stay ahead, front-runners must keep inventing new things. This means that capitalism is inherently unforgiving: today's leader is tomorrow's failure. But it also means that it is inherently progressive, since clever ideas are quickly spread through the economy.

Some striking new research suggests that this Schumpeterian mechanism may have broken down. The leaders are staying ahead much longer than is desirable. A group of researchers at the OECD, a club of mostly rich countries, examined the performance of a representative set of companies in 24 of its 35 member countries between 2001 and 2013. They discovered that the top 5% of them, dubbed "frontier firms", have continued to increase their productivity while the other 95% (the laggards) have been stagnant in this regard.

Plenty of economists have noted what they call a "great stagnation" in the global economy in recent times. The OECD researchers, Dan Andrews, Chiara Criscuolo and Peter Gal, show that beneath the stagnation lies a deeper pattern: rising productivity at the frontier and a widening gap between the leaders and the laggards. Three-quarters of the gap emerged before the global financial crisis of 2008. The divergence varies between sectors: in manufacturing, for example, top-tier firms saw their labour productivity increasing by 2.8% a year, against 0.6% a year for the rest. The gap was even bigger in services: 3.6% compared with 0.4%.

The frontier firms appear to have certain things in common. Unsurprisingly, they are ahead of the pack in technological terms, and they make much more intensive use of patents. Perhaps the most striking difference is that frontier firms are always citizens of the world. They are frequently part of multinational groups and they constantly benchmark themselves against other frontier companies across the globe. So technological innovations from the frontier are spreading more rapidly across countries than they are within them. The gap between an elite British firm and an elite Chinese firm is narrowing even as the gap between an elite

British firm and its laggardly compatriot is expanding.

The emergence of frontier firms is in many ways surprising. Management gurus have been arguing for years that the balance of advantage is shifting from incumbents to challengers. Small firms can easily buy computing power that used to be reserved for corporate giants. Valuable MBA graduates are now being minted by the million and are waiting to be hired. If that is the case, why are the elite pulling ahead in so many different countries at the same time?

An obvious explanation is that digital technology is unleashing a phenomenon of "winner-take-most" markets thanks to a combination of low marginal costs (which allow first movers to expand quickly) and network effects (which make popularity its own, profitable, reward). The OECD notes that the information-technology industry is producing a class of super-frontier firms: the productivity of the top 2% of IT companies has risen relative to that of other elite firms. Other studies show that this is not because the top tier are investing more in technology (everybody is throwing money at it) but because they are investing more intelligently to enable their workers to do new things and to reinvent their business models.

A second explanation is that frontier firms (the 5%) have each discovered their own secret sauce. Some have learned how to foster management techniques that are largely inimitable. This seems to be so at 3G Capital, a Brazilian private-equity group, which takes over mature businesses and squeezes out costs that no one else can. Some are combining skills in unusual ways: Amazon mixes digital prowess with just-in-time logistics. Some have devised rare material inputs. BMW, a carmaker, is using a special carbon fibre, stronger and lighter than steel, for its i3 and i8 electric cars. The material starts life in a Japanese rayon factory, goes to America to be carbonised and is then sent to Germany, where the strands are woven into sheets.

The chosen ones

Third, technological diffusion has stalled: cutting-edge ideas are not spreading through the economy in the way that they used to, leaving productivity-improving ideas stuck at the frontier. Such diffusion may be harder in a knowledge-intensive economy because frontier firms can hire the most talented workers and cultivate relations with the best universities and consultancies. But it is also made worse by bad policy. The OECD notes that divergence in productivity is particularly marked in sectors which have been sheltered from competition and globalisation, most notably services.

Can anything be done to fix the diffusion problem? One approach is to try to get frontier firms to spread their best practices to the laggards. In Britain, which is dogged by a long tail of poorly performing firms, a group of businesspeople, led by Charlie Mayfield, chairman of the John Lewis Partnership, a retail group, have formed an initiative to encourage them to improve their productivity. Another tack is for policymakers to try to open protected areas of the economy to more competition: the European Union has been eyeing the service sector for years. There are problems with both approaches. Frontier companies will certainly not share all their secrets with the laggards. The EU will become more unpopular than it already is if it tries to take on the continent's coddled service firms. But policymakers nevertheless need to find a way of addressing this problem if the rich world is to stand any chance of getting out of its productivity funk. ■



The world economy

Our election, your problem

A Trump presidency will be bad for the world economy and worse for places outside America

IT IS not clear precisely how Donald Trump will govern, the extent to which he will carry out some of his scarier promises on trade and immigration, and who will be his economics top brass at the Treasury and in the White House. But a decent first guess is that President Trump will be bad for the world economy in aggregate; and a second is that his actions are likely to do more harm, in the short term at least, to economies outside America.

When America has in the past stepped aside from its role at the centre of the global economic system, the damage has spread well beyond its borders. In 1971, when Richard Nixon ended the post-war system of fixed exchange-rates that had America at its centre, his Treasury secretary, John Connally, told European leaders, "The dollar is our currency, but your problem." This election result, to paraphrase Connally, belongs to America but is potentially a bigger economic problem for everyone else.

The scale and nature of that problem depend on the interplay of the two main elements of Mr Trump's economic populism. The first is action to boost aggregate demand. Mr Trump favours tax cuts and extra public spending on infrastructure. The second element is trade protectionism. He has pledged to slap tariffs on Chinese imports and to renegotiate the North American Free-Trade Agreement (NAFTA) with Mexico and Canada. To the extent that he leans more on the first element and

less on the second, the immediate damage to America's economy will be limited. But even in that event, the net effect of a Trump presidency on economies outside America is still likely to be harmful.

To understand why, go back to the subject of Connally's gibe: the dollar. As it became clear that Mr Trump would win the election, the greenback fell against rich-country currencies, such as the euro, yen, Swiss franc and pound, as investors sought a haven from policy uncertainty in America. An index of its value against major currencies dropped by 2% in early trading on November 9th. Within hours it had regained almost all the lost ground, as investors pieced together a positive story for the dollar, based on the prospects of a boost to demand in America's economy and an inflow of capital from abroad.

Bringing it all back home

A deal between Mr Trump and Congress to cut corporate taxes, goes the logic, would spur flush American companies to repatriate retained profits held offshore. It would also allow them to increase capital spending in America, because they would have more ready cash; and consequent profits would be taxed more lightly. The larger budget deficits entailed by tax reform, along with more public spending on infrastructure, would underpin yields on long-term Treasury bonds. Indeed, after falling in the initial aftermath of Mr Trump's vic-

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tory, yields on 10- and 30-year Treasuries are on the rise again (see chart). Add the potential for higher inflation from the stimulus and the likelier use of some protectionist tariffs, plus a Federal Reserve with a more hawkish tilt, as Mr Trump's appointees alter the complexion of its interest-rate-setting committee, and you have the makings of a renewed dollar rally.

A fiscal stimulus coupled with an investment splurge in the world's largest economy should, all else equal, also be good for global aggregate demand. And if this kind of "reflation populism" improves the near-term prospects for America's economy, it may dissuade Mr Trump from resorting to full-strength "anti-trade populism". Well, perhaps. But given his lean- ▶▶

No ordinary day

United States, 2016

Dollar index

November 8th 2016, 00:45 GMT=100



Government-bond yields, %



Source: Bloomberg

ings, it is easy to imagine him resorting to soft protectionism that keeps much of the additional demand within America's borders. He might for instance lean on companies to favour domestic suppliers, or attach local-content conditions to publicly funded infrastructure projects. What is more, the repatriation of profits by American firms would draw resources away from their subsidiaries abroad.

In 1971 the world feared dollar weakness. These days, dollar strength tends to have a tightening effect on global financial conditions. The waxing and waning of the dollar is strongly linked to the ups and

downs of the credit cycle. When the dollar is weak and American interest rates are low, companies outside America are keen to borrow dollars. Often big firms, flush with such cheap loans, will further extend credit in local currencies to smaller ones. But when the dollar goes up, the cycle goes into reverse, as corporate borrowers outside America scramble to pay down their dollar debts. That causes a more general tightening of credit.

Mexico has the most to lose from Mr Trump's presidency, should he keep his campaign promises. So the peso plummeted in the wake of the result. But Mexico,

along with Chile, Turkey, the Philippines and Russia, also has a large burden of dollar debts, which are becoming more expensive in local currency. Mr Trump's protectionist bent may make it hard for emerging markets to trade their way out of trouble. Only a few are likely to be unharmed by his victory (see box on next page).

Where does a Trump victory leave China, the world's second-largest economy? China accounts for roughly a half of America's net trade-deficit, so in Mr Trump's zero-sum reckoning, it has a lot to lose should America launch an all-out trade war. In fact, the resulting disruption to glo- ▶▶

Buttonwood | Déjà vu all over again

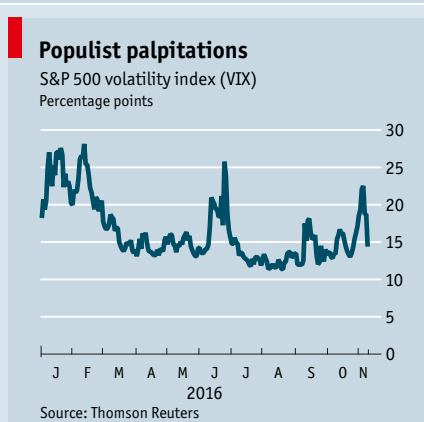
Markets may be volatile for a while after the latest upset

FOR the second time this year, investors have been hit by a political shock: first, the Brexit referendum; now, Donald Trump's election victory. And the reaction has been very similar; a knee-jerk sell-off followed by a pause to consider whether there might be some profitable opportunities after all.

As election night unfolded, markets moved pretty much as they had during the campaign when Mr Trump surged in the polls. Equities fell, Treasury bonds rose in price (causing yields to fall) and the Mexican peso took a battering. The futures contract on the Dow Jones Industrial Average dropped by more than 800 points at one stage. Asia followed suit with widespread declines: the Japanese stockmarket dropped by 4.6%. The Mexican peso dove to a new low of nearly 20.8 to the dollar. Gold gained ground, as it often does when investors are nervous.

But the nature of the financial markets is that sharp moves bring out the bargain-hunters. In this respect, the optimists were helped by a fairly emollient acceptance speech from Mr Trump and the very vagueness of his policy proposals. As Fathom Consulting, an economic research group, put it, "Trump lite" could triumph over "Donald Dark".

Perhaps the more extreme measures on trade proposed by Mr Trump will be blocked by his colleagues or by Congress whereas his plans for tax cuts will be approved, goes the reasoning. This will act as a stimulus for the economy. And a proposed change in the tax rules on foreign profits may cause companies to repatriate cash, giving a short-term boost to the dollar. Shares in health-care firms and coal producers are also seen as beneficiaries of a Trump victory. All this allowed shares on Wall Street to climb on November 9th; that in turn allowed European (and, the



next day, Asian) equity markets to recoup their losses.

A focus on Mr Trump's policy agenda also caused a change of heart in the Treasury-bond market. The prospects of bigger deficits and (possibly) higher inflation under Mr Trump drove yields higher than they were when the polls closed.

This choppiness reflects the confusion of investors who are struggling to cope with the surprise. Similarly, the equity and bond markets were volatile after the Brexit vote before settling down; the one consistent theme was the decline in the pound. Perhaps the safest bet this time is that volatility, as measured by the VIX index (see chart), will pick up in the aftermath of the vote, at least until the direction of the new administration becomes clear.

A lot may depend on the early actions, rather than rhetoric, of the president-elect. Investors will be looking to see some respected and experienced cabinet appointees. They will also be hoping that Mr Trump's hostile comments about Janet Yellen, the head of the Federal Reserve, do not lead to a change of leadership, or a shift to a more hawkish policy, at the central bank.

The irony is palpable. Markets are essentially being reassured by the idea that Mr Trump will not enact many of the policies that got him elected, but will instead focus on a traditional Republican approach of tax cuts for business and the rich. In time, that will make voters more angry and they will look for someone who really will implement the policies they want—and that person could just as easily be on the left as on the right.

Indeed, there is plenty of potential risk ahead. It is not just America that is grappling with the issues of slow growth and immigration. Over the next 12 months, Europe faces a constitutional referendum in Italy, a general election in Germany and a presidential election in France. All three could lead to upsets: the departure of Matteo Renzi or Angela Merkel, or even the election of Marine Le Pen. A rapid change of leadership could plunge the EU back into crisis.

Populism is on the march, and this seems likely to lead to less international co-operation and more restrictions on the free movement of goods and services, capital and people. Such policies may have electoral appeal in the short term; but they are a negative-sum game in aggregate, as the 1930s demonstrated.

Investors may thus face a no-win situation. Unless the share of GDP in the developed world shifts in favour of labour and away from capital, populists will be elected. And if populists are elected, and enact the protectionist and anti-immigration policies voters appear to want, not only might capital's share of GDP fall, but GDP might grow even more slowly. The reverberations from Mr Trump's triumph will echo far longer than over the first few trading sessions.



► bal supply-chains would badly hurt American firms, and higher prices on imported goods would squeeze American consumers, especially poorer households, which spend proportionately more on them.

Yet there are risks to China's economy too, from even a milder form of Trumpian populism. The dollar's weakness over the spring and summer helped stem the outflow of capital from China that had threatened to unmoor the yuan and so unsettled global financial markets at the turn of the year. A sustained dollar rally would thus mean a severe headache for China's policymakers, as it would revive the pressure on its capital account. They might then face an unpalatable choice: let the yuan sink against the dollar or keep domestic monetary policy tighter to support it.

China is safe from the biggest indirect effect of Mr Trump's victory: the boost it gives other populist politicians. Europe is far more vulnerable. Britain's vote in June to leave the European Union was one early ballot-box reflection of anti-establishment sentiment. Since then, insurgent political parties in France, Germany, Italy and else-

The world economy

Coming up Trumps

Some unlikely economies are poised to do well

THOUGH many outside America are dismayed at the prospect of Donald Trump as president, not everyone is despondent. When the news of Mr Trump's victory reached the floor of the Duma, Russia's lower house of parliament, the assembled politicians burst into applause. Such enthusiasm in Russia is in part a reflection of the bromance between Mr Trump and Vladimir Putin, Russia's president. But it is also because Russia may be one of the few economies that might benefit from—or at least, be indifferent to—a Trump presidency.

It helps that Russia's economy has endured a rough time recently and that some kind of rebound is probably due. Its GDP fell by 3.7% last year and will shrink again this year, according to the IMF. Russia has one of the cheapest currencies in *The Economist's* Big Mac Index, which compares the relative cost of burgers across the globe. By this measure, the rouble is around 60% undervalued against the dollar. Inflation, which rose to over 16% in early 2015 after a big fall in the rouble, has fallen to around 6%. That has allowed Russia's central bank gradually to reduce interest rates from a peak of 17% to 10%. Mr Trump's victory raises the chances that economic sanctions imposed by the West, following Russian interference in Ukraine, will be lifted. That will give the economy an extra fillip.

Tellingly, other candidates for betterment in the early part of Mr Trump's

presidency are also beaten-down economies with the potential to rebound. Egypt has many problems but now it at least has one of the world's cheapest currencies (by the Big Mac gauge), following its recent decision to let the pound float. Devaluation will further push up inflation but should in time relieve the shortage of foreign currency that has hampered Egyptian business. Argentina's economy has gone through some of the pain that lies ahead for Egypt. If global markets do not go into a tailspin, it could bounce back in 2017, even if hopes of a trade deal with America now look forlorn. Pakistan's economy has been quietly improving in recent years, helped by a lower price of oil, on which it is heavily reliant. It is perhaps too peripheral to America's economy to be knocked off its present course.

If pushed, a hopeless optimist might make a medium-term case for China, if it can avoid an all-out trade war with America in the meantime. It is unlikely to mourn the likely death of the Trans-Pacific Partnership, or TPP, a trade deal negotiated by Barack Obama but slammed by Mr Trump on the campaign trail. China was not a party to it and it posed a minor threat to its production networks in Asia. And if the wave of populism that spawned Brexit and now elected Mr Trump engulfs the euro area, China might even begin to look like a refuge for rich-world investors.

where have called for referendums on membership. Such parties typically favour trade barriers and limits on immigration, and are gaining in popularity.

The euro area's economy has been faring better in recent years, but the single currency remains fragile. The kind of cross-border risk-sharing needed to put the euro on a sound footing is at odds with the rising tides of nationalism and populism. An immediate hurdle is Italy's referendum on constitutional reform on December 4th. A defeat would weaken Matteo Renzi, the reformist prime minister, and embolden the populist Five Star Movement, which favours ditching the euro. Around 14% of the euro area's goods exports go to America, quite a bit less than China's 18%. But America accounts for about 40% of the currency zone's recent export growth, according to economists at HSBC, a bank. So American protectionism is arguably a bigger threat to Europe than to China.

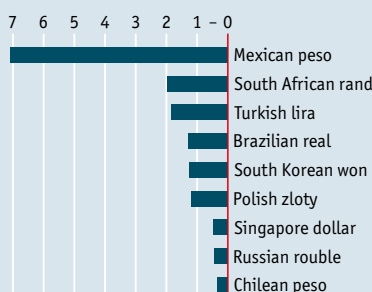
The whole world has much to fear from

Mr Trump's threats to tear up trade agreements and impose punitive tariffs on imports. And even if he refrains from starting a trade war, the loose-tongued, fact-lite style he cultivated during the campaign could wreak serious damage when he is president. His hyperbolic threats now carry the weight of the American presidency. His victory was enough to chill some financial markets; what he might do with it could spark full-scale panic. Even short of that, like the Brexit vote, it marks an alarming step away from a liberal, open economic order towards more isolationism and less prosperity. ■

Internship: Applications are invited for a Marjorie Deane internship in *The Economist's* New York bureau. The award is designed to provide work experience for a promising journalist or would-be journalist, who will spend three to six months at *The Economist* writing about economics and finance. Applicants are asked to write a covering letter and an article of no more than 500 words, suitable for publication in *The Economist*. Applications should be sent by December 14th to deaneinternny@economist.com.

Trump's dollar

Currencies against the \$
November 9th 2016, % decrease on a day earlier



Source: Thomson Reuters

Housing in America (1)

The cost of poor lending

NEW YORK

A city seeks the right to sue banks for irresponsible mortgage-lending

ATODDLER drowns in the swimming pool of his neighbour's vacant house. A firefighter dies falling through the floor of a vacant building. A gang take over an empty house...to advertise prostitution." Thus begins an incendiary supporting brief filed by a trade union for police officers and firefighters in a suit brought by the city of Miami against Wells Fargo and Bank of America. The suit argues that mortgages granted by the banks to black and Hispanic residents who later defaulted caused the city to lose tax revenue and forced it to fork out more for services. This, it contends, entitles Miami to damages.

The case was largely dismissed in the trial court, reversed on appeal and then accepted by the Supreme Court, which heard oral arguments on November 8th. At issue is who can sue for alleged discrimination, and whether irresponsible loans can be blamed for broader economic damage. A separate court will consider whether the banks were actually guilty of discrimination (they deny it).

Part of civil-rights legislation passed in 1968, the "Fair Housing Act", the statute under which the case is being brought, granted the right to sue to "an aggrieved person". In the past the aggrieved have been understood to be individuals who were directly harmed by discrimination and, in a subsequent interpretation, their neighbours. Miami's suit would place the city in the position of an individual, with a financial stake in the outcome. Two departments of the federal government, Justice

and Housing and Urban Development, which did not have a direct financial interest, could also bring cases.

The stakes are enormous. In a hint of what is to come, Memphis and Baltimore have already settled similar cases for millions of dollars. John Roberts, the chief justice, noted that would be a fraction of what would ensue were the Supreme Court to uphold Miami's position. At least a dozen other cases are percolating, including ones in Los Angeles and Cook County, Illinois (Chicago). Others would be encouraged by the prospect of a windfall. "There are 19,300 cities in America," Neal Katyal, a lawyer for the banks, told the justices: if Miami prevails, all of them might bring similar suits.

The case provoked such interest that queues formed at the courthouse hours ahead of the hearing. Eighteen groups submitted "amicus" briefs—arguments supporting one side or the other. They came from lobbies for trade unions, civil-rights groups and businesses. The union petition quoted above was particularly vivid (and came with pictures). But there was no shortage of expansive claims.

Advocacy groups faulted banks for lending practices that they claimed blighted the city and contributed to substandard housing and segregation. Briefs backing the banks argued that a ruling in favour of Miami could transform cities into extortion rackets, able to gain large settlements from lenders worried about the cost of an investigation and the publicity accompa-

nying even a spurious case.

If Miami were able to seek financial redress, others might also qualify: property-owners, local merchants, school districts and on and on, creating, in Mr Katyal's summary before the court, "an unlimited theory of liability". Among the most striking contentions was one included in a submission by a chamber of commerce and an insurers' association. It argued that, faced with the added risk, not only of losing money on mortgages but also of being sued, lenders would "make major, societally undesirable adjustments in their lending practices". In other words, they would lend less in poor areas.

That would be an ironic outcome, given the history of the underlying law. It was enacted to attack "redlining", meaning restrictions on credit in black neighbourhoods. Miami's case is premised on a later theory, "reverse redlining". This contends that borrowers were discriminated against because they were given too much credit at too high a cost. It is a complex issue, supported by statistical analysis that the banks dispute. A verdict is expected early in 2017, probably from a divided court. That is unlikely to mark the end of what could be years of acrimonious legal skirmishes. ■

Housing in America (2)

To those that have

Prices are diverging on geographic, social and ethnic lines

PITTSFIELD, a city of 43,000 on the Housatonic River in western Massachusetts, is a quintessentially American place, but in many ways an unlikely spot for a housing boom. The 255-year-old former industrial hub boasts the country's earliest written reference to baseball. Its economy was dominated by General Electric for much of the 20th century. But by 2000 it had experienced ten years in which hardly any new jobs had been created. Incomes were 12% below the national average. The city's population had been shrinking for decades. And yet between 2000 and 2007, amid a nationwide, credit-fuelled property boom, house prices in Pittsfield jumped by 70%, or 8% per year.

These days, such rapid growth in economically struggling cities is rare. Whereas local housing markets rose and fell together during the housing bubble and bust, the housing recovery which began in America in 2012 has been patchy. Cities and towns with growing economies have seen big gains; places like Pittsfield have stagnated (see chart 1 on next page). Such trends are contributing to a widening of America's al- ►►



The Miami blues

Divergent

United States, metro areas
With at least 100,000 population



Sources: Freddie Mac; US Bureau of Labour Statistics

▶ ready unequal distribution of wealth.

According to an annual survey of consumer expenditure from the Bureau of Labour Statistics (BLS), homeowners without a college degree have seen the value of their homes appreciate by less than 0.2% since 2012, whereas college graduates have enjoyed gains of 10.8%. Similar discrepancies are evident for black and white homeowners, whose properties have fallen in value by 1.5% and risen by 9.8% respectively (see chart 2).

That local economic conditions should play an important role in housing markets seems obvious. The price of a home, like that of any other asset, is driven by supply and demand. Cities with rising wages and growing workforces will have higher housing demand. In recent decades, high-skilled workers have increasingly sorted themselves geographically, preferring to live in high-wage cities with desirable local amenities. This has led to the growth of places that some economists have dubbed “superstar cities”.

Data from the BLS and Freddie Mac, a government-supported mortgage agency, suggest that the relationship between economic fundamentals and house prices across metropolitan areas is stronger today than in past cycles. During the two decades leading up to the housing crisis, employment and income growth could account for about 33% of the variation in house-price appreciation across the country's 380-odd “metro” areas. Since 2012, when the American housing market's recovery began, this figure has jumped to 48%. Before the crash, a percentage-point increase in employment growth was associated with a rise of 0.6-0.7 points in house-price growth. In the past four years, such a rise in employment growth has come with a two-point increase in house-price growth.

A paper published in 2010 by Stijn Van Nieuwerburgh, of New York University, and Pierre-Olivier Weill, of the University of California, Los Angeles, found that the association between incomes and house prices had strengthened. Between 1975 and 2007 house prices became ten times more

sensitive to wages. As productivity and wage gaps across metro areas widened, house prices also diverged. This trend has continued.

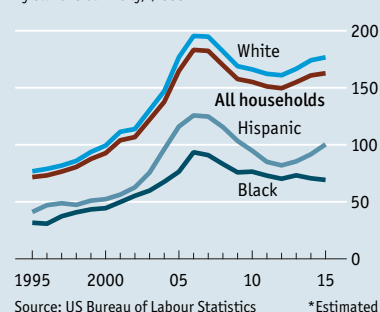
Changes in lending practices have also contributed to the divergences. During the housing boom, prices rose in virtually every metropolitan area, regardless of employment or income growth. Joseph Gyourko, of the University of Pennsylvania, says that these economic fundamentals were largely ignored at the time because credit was so widely available.

Since then, banks have tightened lending standards and shifted credit to better-off borrowers. According to data from the Federal Reserve Bank of New York, the credit score of a typical mortgage-borrower is now roughly 50 points above its pre-crash low (from about 700 to about 750). This has allowed the most creditworthy to bid up prices further in cities like San Francisco, while prices in places like Charleston, West Virginia, have sagged.

Housing experts agree that a stronger

A widening gap

United States, average market value* of home
By owner's ethnicity, \$'000



Source: US Bureau of Labour Statistics

* Estimated

link between local house prices and underlying economic fundamentals is a positive development. And yet diverging housing-market trends across high- and low-wage cities will inevitably contribute to growing wealth and racial inequality. “Superstar cities” will lose their lustre if they are affordable only to the richest. ■

**Money in India****Taking notes**

MUMBAI

The government transforms base money into nothingness (and gold)

NOT much distinguishes a valuable banknote from any old piece of printed paper, as Indians discovered this week. In a surprise televised address on November 8th, Narendra Modi, the prime minister, announced that the country's two highest-denomination notes, worth 500 and 1,000 rupees (\$7.50 and \$15), were to be legally worthless with near-immediate effect. This odd variant of alchemy is the latest in a series of moves to curb illicit

income; economists hope long-term gains will justify a chaotic spell as India adapts.

The idea is not as barmy as it might first appear. Mr Modi has implemented a flurry of schemes to flush out “black money”, the term Indians use for cash which is both unaccounted for and outside its formal financial system. Piles of ill-gotten income have long been easy to launder into gold or property, where using notes for at least part of a purchase is the norm. “Demonetising” ▶▶

Banks and cybercrime

Online checkout

Theft strikes a British lender

“EVERY little helps.” The thieves may have found Tesco’s advertising slogan only too apt. Over the weekend of November 5th and 6th, Tesco Bank, the financial arm of Britain’s biggest retailer, detected “suspicious transactions” on 40,000 current (ie, checking) accounts. Online raiders succeeded in stealing from 9,000: some customers spotted dodgy payments to companies in Brazil and Spain. On November 8th Tesco Bank said it had reimbursed all losses, to the tune of £2.5m (\$3.1m). Online transactions from current accounts, which it had suspended, were up and running again.

If the bank or other investigators have any idea who stole the money and how, they are not saying. Reports say that GCHQ, a spy agency, has been called in. All this has fed rather than starved speculation: an MP has said “state-sponsored” crime cannot be ruled out. There is little to go on, notes Alfredo Pironti of IO Active, a cyber-security company. One possibility is that the thieves found a weakness in the bank’s web application. Another is that they managed to filch lots of customers’ passwords over a period of time and exploited them in one go. Still another is that they duped staff into giving away information that eventually led them to the bank’s servers. Some have even mused about an inside job.

“The number of compromised accounts is what jumps out as unusual,” says Tim Erlin of Tripwire, another online-security firm. Banks usually detect

cyber-thieves in their systems before they can burgle at will. Skimming debit cards using devices or malware placed on automated teller machines—another method for stealing money from consumer accounts—is, says Mr Erlin, difficult to carry out at scale.

Unlike its parent, Tesco Bank is a minnow: Britain’s 24th-biggest bank by assets, according to the *Banker*. It has just 136,000 current accounts—so the thieves dipped into one in 15. Begun as a joint venture with the Royal Bank of Scotland but wholly owned by Tesco since 2008, Tesco Bank has been growing nicely. Its balance-sheet expanded by 13% in the year to August, to £11.9bn; deposits jumped by 23%, to £8.1bn. It chipped in £89m to Tesco’s first-half operating profit of £596m—handy when supermarkets are under assault from discount chains.

Tesco must now be worrying whether people attracted by generous interest rates—3% on its current account—and a cosier brand than Britain’s high-street banks will want to stay. That brand has already been tarnished by an accounting scandal in 2014: three former directors have been charged with fraud. Speedy recompense may not make up for those nervous weekend hours on hold to the call centre or the simple fact of the heist. Less fairly, Britons may now be more reluctant to trust other online upstarts wanting to take on the big lenders—and who aren’t running a bank as a sideline to flogging cornflakes.

fessions where cash still rules will also be hard hit. Political parties hoarding cash for election-time handouts to voters will have to tidy up their finances. Even e-commerce sites like Amazon will be affected: over two-thirds of their sales are settled by the buyers in cash on delivery.

A new, shady line of work is already emerging: opportunists are said to be snapping up 1,000-rupee notes at a deep discount from those with too much stashed cash to declare. They will profit handsomely if they can find smaller savers willing to swap the old notes for new ones on their behalf, for a fee. The government has indicated it is gunning for those with suitcases full of rupees rather than merely a few stapled or elastic-banded wads.

Some aspects of the plan are difficult to fathom. Prominent economists, such as Kenneth Rogoff of Harvard University, are keen to scrap big-denomination notes altogether. But India will merely replace them. Worse, it will add a 2,000-rupee series—introducing a note that will have few conceivable uses other than mattress-stuffing, smuggling or gambling (getting change for even a 500-rupee note is already close to impossible).

The timing is also odd. India has recently introduced a system that makes it easy for anybody to make or receive payments from their mobile phone, whether they be businesses or individuals. But the Unified Payments Interface, as it is known, is still in the early stages of implementation, so cannot really help overcome the current cash-crunch. Mr Modi also took the cash out of circulation just as polls opened in America, eventually roiling markets.

Cancelling banknotes is usually the work of desperate or misguided regimes. This looks different. Indeed, the assault on black money is justified and overdue. But governments change the rules on the world’s simplest financial instrument—the humble banknote—at their peril. Gold is already favoured by those who want to keep their savings beyond the reach of government and taxman. Gold bugs may feel vindicated; others will have taken note. ■

► high-value tender means existing notes must be traded in at banks and post offices before the end of the year. That will force those with suitcases of cash either to come clean or to renounce their loot.

Still, it is dramatic: central banks usually balk at moves that call into question the legal worth of the notes they issue. The hastily discontinued tender represents 86% of all the currency in circulation (equivalent to 11% of GDP) in a country where cash remains king. Many Indian residents found themselves with little still-legal cash on hand ahead of a forcibly imposed bank holiday and a two-day shutdown of ATMs. A senior bank executive in Mumbai admitted to raiding his daughter’s piggy bank to pay for tolls on his way to work.

The prospect of life with little or no cash, at least for a few days, cheered those who think Indians should be switching to smartphone apps and card-based payments, which are easier for the authorities

to track and tax. That laudable aim will take time in a country where nine out of every ten workers still toil in the informal sector. Though the number of Indians with bank accounts has risen sharply thanks to a government financial-inclusion scheme, most savings are still held outside the banking system. One-fifth of total economic output is said to be informal.

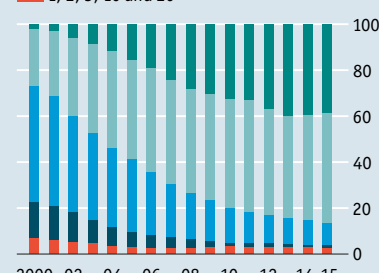
Banks are among those who should gain from the scheme: much cash now sequestered under mattresses should make its way into their coffers or into the mutual funds they offer. Against that, the black-money crackdown will probably dent (or worse) already-fragile property prices, especially in big cities—and so the value of the collateral the banks lend against.

Most economists expect the dislocation to dampen growth in the short-term. Households will probably put off big-ticket purchases such as motorbikes or white goods. Jewellers, doctors and others in pro-

Cashing out

India, rupee notes in circulation, % of total value

1,000 500 100 50
1, 2, 5, 10 and 20



Source: Reserve Bank of India



Particle physics

So long, Susy?

A bet against one of the most cherished theories in physics may soon pay out

IN 1994, on a warm summer's evening in Erice, in Sicily, in the midst of a pleasantly well-lubricated dinner, two physicists made a wager on the laws of nature. The bet between Kenneth Lane and David Gross concerned supersymmetry, or "Susy" for short, a theory which stipulates that all known fundamental particles have heavier, supersymmetric counterparts called sparticles.

When the bet was laid, no sparticles had been spotted. Yet plans for a powerful particle accelerator called the Large Hadron Collider (LHC) were being drawn up. Dr Lane proposed that if the new machine found evidence for the theory, he would buy the table dinner at Girardet's, an expensive restaurant in Switzerland considered by some the best in the world. If not, then dinner would be on Dr Gross. The terms, scribbled on a napkin, stipulated that the bet would be payable once the LHC had produced enough data to be sure of the outcome. The chosen figure, in the obscure units used by physicists, was 50 inverse femtobarns, or roughly 5 quadrillion of the high-energy collisions between particles that the LHC is designed to produce.

Two decades on, Girardet's is no more. But the LHC is in rude health. It has, since 2010, collected about 60 inverse femtobarns of data. With no sightings of the particles that Susy predicts, Dr Lane says it is time for Dr Gross (who won the Nobel prize in 2004) to cough up—if not with din-

ner at Girardet's then at another suitably ritzy venue. After receiving no response to several e-mail prompts, however, Dr Lane is growing impatient. "David appears to be welshing on our bet," he says.

One indication of the strength of feeling surrounding Susy is that the Erice bet is not unique. Another, wagering a bottle of cognac on the discovery of a sparticle by June 2016, was settled, in the sceptic's favour, over the summer.

Collision course

Susy has many fans. That is because, if it is true, it could help solve many physical puzzles. Dark matter, for instance, is a mysterious substance known to make up about 27% of the total amount of stuff, both matter and energy, in the universe. The particles predicted by Susy are one plausible dark-matter candidate. A "grand unified theory", for which physicists have been hunting for decades, would explain how fundamental forces such as gravity and electromagnetism merge into a single force at the very high temperatures thought to have existed shortly after the Big Bang. Susy can help build such theories.

It could also make sense of a peculiarity of the Higgs boson, a long-sought particle discovered by the LHC in 2012. The Higgs interacts with many other particles. Summed together, these give it its mass. But trying to predict that mass by calculating it yields a number about 10 quadrillion

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times larger than its actual value. Fixing the maths requires a large and ugly fudge. Susy's hypothesised sparticles cancel out the contributions from their "real" partners, meaning no fudge is needed.

Strictly speaking, Susy can never be formally disproved. It can always be tweaked so that sparticles appear only at energies that are just out of reach of the best existing colliders. Yet the more such tweaks are applied, the more they erode the elegance for which the theory is admired.

In light of the LHC's failure to find evidence for Susy, more physicists are arguing that the field's obsession with the theory is a waste of time and effort. Scientists at the LHC filter the data they record by looking first for particles predicted by favoured theories, including Susy. Less popular ideas get a smaller share of the resources. That could delay other discoveries. Dr Lane, for instance, thinks so-called composite-Higgs models, which assume the Higgs is made up of even smaller constituent particles, should get more attention.

Sabine Hossenfelder, a theoretical physicist at the Frankfurt Institute for Advanced Studies, is one of many who think it is time for theorists to focus on other problems—how gravity behaves at the very small scales of quantum mechanics, for instance. If the LHC finds no trace of sparticles in this year's data, she believes the last thing the field needs is another round of Susy model adjustments. "That's not science," she says. "That's pathetic."

Dr Gross is not ready to concede quite yet. The data are in, but their analysis is not complete. "It looks like I will lose this bet by the end of the year," he says, "but we should await the word from the experimenters themselves." (Dr Lane says the original terms have been met and Dr Gross should throw in the towel.)

In the longer term, there is more at stake ►►

▶ than a fancy dinner and a firmer understanding of the nature of reality. Colliders are expensive—the LHC cost \$5bn to build. It has many years still to run, and plenty of time to discover something new. But its apparent failure to find convincing evidence for Susy has some worried that, if the LHC fails to turn up much new physics of any sort, plans for yet bigger colliders will be harder to justify.

Others are more sanguine: the history of science is, after all, littered with much-loved but wrong theories, from the idea that Earth is the centre of creation to the “luminiferous ether” that was thought, in the 19th century, to suffuse the universe. If Susy comes to nothing, Dr Gross hopes that will inspire new ideas from young theorists. “That”, he adds, “is a category that does not contain either Lane or me.” ■

Palaeontology

Origin story

A new find sheds light on the earliest history of the dinosaurs

HOW the dinosaurs died out after ruling the planet for over 150m years was a mystery that consumed palaeontologists throughout much of the 20th century. These days it is mostly accepted that they were done in by the climatic after-effects of the impact of a giant asteroid, specifically the one that carved a vast crater 180km across near the Yucatan Peninsula in Mexico. Now the focus has shifted from how they died out to where they came from in the first place. In a paper just published in *Current Biology*, a team led by Max Langer at the University of São Paulo reports the excavation of four fossils that shed some intriguing light on two different aspects of

that question.

The fossils, found by Sergio Cabreira at the Lutheran University of Brazil, come from the Santa Maria formation in the south of the country. One of them, at 230m years in age, is one of the oldest dinosaur fossils ever found. Typically, such ancient finds are nothing more than bone fragments, but this specimen, named *Buriol-estes schultzi*, is in remarkably good shape. It is a distant ancestor of the long-necked sauropods such as *Diplodocus* and *Brachiosaurus*. Those giant animals, which stood up to 16 metres high and weighed 50 tonnes or more, were vegetarians.

B. schultzi seems to have been both diminutive—about 1.5 metres long—and carnivorous. Its teeth are curved and have serrated edges, traits usually associated with meat-eating. That finding raises as many questions as it answers: palaeontologists must now ponder when and why sauropods made the switch from eating meat to eating plants. Size probably had something to do with it: it is difficult to see how an animal the size of *Brachiosaurus* could have hunted enough prey to support its enormous bulk. But were *B. schultzi*'s descendants forced to become herbivorous as they grew? Or did they switch to a vegetable diet first, then take advantage of the opportunities for growth that offered?

The other fossils in the find address a different question. Palaeontologists have long thought that dinosaurs rose to dominance at the dawn of the Jurassic period, 201m years ago, by out-competing and rapidly replacing other land animals that emerged earlier. One such group was the lagerpetids, a group of reptiles with some dinosaurian characteristics that arose about 236m years ago, during the Triassic period.

Yet evidence has been mounting that suggests this argument is wrong. Several dinosaur and lagerpetid bone fragments have been found alongside one another in Triassic rocks, hinting that, instead of out-

competing the lagerpetids, the dinosaurs coexisted alongside them for millions of years. The Brazilian discovery builds on these fragmentary finds to deal the rapid replacement argument a fatal blow, by clearly revealing a lagerpetid living alongside a dinosaur more than 30m years before the start of the Jurassic. The worlds' museums of natural history will have to update their displays. ■

Space exploration

Dusting yourself down

A new spacesuit could resist the damaging effects of sharp lunar dust

“PICKING up some dust.” So said Buzz Aldrin on July 20th 1969, as he and Neil Armstrong descended towards the lunar surface. It is not the most famous quote from that day. But the lunar dust kicked up by Aldrin's and Armstrong's descending spacecraft would go on to become a serious, if under-appreciated, problem for all of the Apollo astronauts.

Lunar dust consists of rock pulverised to the consistency of talcum powder by micrometeoroid impacts. The fragments are sharp, and because there is no weather on the Moon, and therefore no erosion, they stay that way. At the same time, the solar wind bombards the dust with charged particles from the sun, giving it a static charge that makes it cling to anything it touches.

The jagged dust fragments blackened spacesuits, causing them to absorb too much heat. They tore tiny leaks in joint seals, resulting in pressure leaks and risking total failure of the suits. They scratched visors, hindering visibility, and caked batteries, making them overheat. Trapped back into the spacecraft, they escaped into the air, from where the astronauts had little choice but to breathe them in and risk any potential health consequences.

Half a century later NASA is pondering a return to the Moon, as a stepping stone for missions to Mars and the asteroids. At the same time a growing number of private firms have ambitions to mine precious metals from those celestial bodies, too. One of the (many) problems that NASA and the space-prospecting crowd will have to solve is what to do about the dust. Fortunately for them Kavya Manyapu, an engineer at Boeing who has been working with scientists from NASA's Glenn Research Centre, may have a solution.

Ms Manyapu has come up with a new kind of spacesuit material that neutralises the dust in two different ways, one passive and one active. The passive strategy is a novel polymer-based coating that is ap- ▶▶



My, what sharp teeth you have

Drug development

Pets on trial

Household animals might make better research subjects than laboratory ones

DRUG development is a risky—and costly—business. Many promising compounds fail to cut the mustard when put through clinical trials. One reason is that drugs which work on laboratory animals may not work quite so well in human tests. Being able to pick winners and losers as early as possible would save money, and the One Health Company, based in Philadelphia, thinks it may have found a way. It is offering to help pharmaceutical firms test their wares on sick pets. Its first guinea pigs, as it were, will be dogs suffering from cancer.

There are several benefits, says the firm. By treating animals with existing cancers, it hopes to dodge a problem with modern animal research, which is that the “model” animals and diseases that are used to test drugs are not always good stand-ins for the natural illness. For example, mice used to test cancer drugs may have had their tumours grafted surgically into their bodies, and their immune systems knocked out with drugs or by genetic engineering.

Another plus is that pet owners tend to be dedicated carers who are very knowledgeable about their four-legged companions and are likely to report even small changes in symptoms. Lab animals are checked far less frequently. Owners so far have been keen: the company claims that 64% of those told about the scheme sign up, a very high proportion.

Perhaps the most useful aspect of pet clinical trials, however, is the lack of



An idea with legs

government regulations covering medical records. One Health has been able to get access to 98% of records on animals from hospitals—a number that is unheard for human medical records. That allows the firm to identify patients and tissue samples, and recruit participants.

Over time, the firm hopes that pets will prove useful in diseases other than cancers. Horses, for instance, seem to be good proxies for humans when it comes to arthritis. Cats, meanwhile, may prove instructive in breast-cancer research. For now, those who enrol their pooches get a double benefit. Fido does his bit for science. And while doing so he gets access to what are, One Health hopes, cutting-edge cancer drugs.

bances are tiny, which means MAD is only useful at ranges of a few hundred metres.

There may, though, be a better way. Thanks to something called the Debye effect, it might be possible to hunt submarines using the magnetic signatures of their wakes. Seawater is salty, full of ions of sodium and chlorine. Because those ions have different masses, any nudge—such as a passing submarine—moves some farther than others. Each ion carries an electric charge, and the movement of those charges produces a magnetic field.

The Debye effect has been known since 1933, but its effects were thought to be tiny. The American navy set out to explore it nonetheless in 2009, giving research grants to three firms to check whether it could be used for submarine detection. One, Cortana Corporation of Church Falls, Virginia, found a significant effect. Cortana was given a second grant in 2011 to continue the work, which was expected to produce a sensor which could be deployed from a ship. Since then the navy has continued to award Cortana grants for hush-hush jobs.

Neither Cortana nor the navy will discuss exactly what they are up to. But it is likely that the technique can only detect certain submarine movements in some situations. Submarines produce many different types of wake. As well as the familiar V-shaped wake they leave underwater disturbances known as “internal waves”, flat swirls called “pancake eddies” and miniature vortices which spin off from fins and control surfaces. These all depend not only on speed and depth but also on the submarine’s hydrodynamics (the underwater version of aerodynamics).

It is early days for the technology, at least in the West. But work done in Russia, whose navy has long been interested in alternatives to sonar, suggests the Debye effect can be turned into something quite potent. In 1990, two contributors to the Soviet military magazine *Naval Collection* wrote that “as a consequence of the great extent of the wake, it is easier to detect this anomaly than the magnetic anomaly due to the metallic hull of the submarine.” That suggests that a well-tuned Debye detector might be able to pick up a trail from several kilometres back and follow it to find the submarine. Russia’s claims in this area have long been regarded in the West as exaggerated. The new American interest suggests they might not have been.

Things are likely to get easier, too: a new generation of high-tech magnetic sensors based on machines called SQUIDS—“superconducting quantum interference devices”—should be more sensitive than existing ones. Both America and Britain are in the midst of replacing their present generation of nuclear-armed submarines. The new boats will be some of the quietest ever built. But if their wakes give them away, that may not matter. ■

► plied to the top of an ordinary fabric space-suit. It is impregnated with tiny dust-like particles of its own, which makes it harder for the real thing to stick.

To get rid of any dust that does nevertheless manage to accumulate, the material also has embedded within it a yarn made of conducting carbon-nanotube fibres. Connect those to a power source, and the fabric can create an electric field that repels the charged dust particles. In tests, the two systems managed to repel about 90% of the simulated lunar dust that the material was exposed to.

That would be a useful trick for future lunar explorers. But as is traditional for technology developed for use in space, Boeing is keen on terrestrial applications, too. The firm reckons its dust-repellent fabric could find uses in medicine or clean-room manufacturing. But until it has patented the idea, the company is not going into specifics. ■

Naval warfare

Follow the trail

Magnetism may hold the key to detecting even ultra-quiet submarines

SUBMARINES rely on stealth to do their jobs, whether that is sinking enemy ships or hiding nuclear-tipped missiles beneath the ocean. The traditional way of hunting them is with sonar. Modern sonar is extremely sensitive. But modern submarines are very quiet, and neither side has gained a definitive upper hand.

There are other options. Submarine-spotting aircraft carry “magnetic anomaly detectors” (MAD) which pick up disturbances in the Earth’s magnetic field caused by a submarine’s metal hull. Those distur-

Global warming

Days of the triffids

More photosynthesis means a slower rise in carbon-dioxide levels—for now

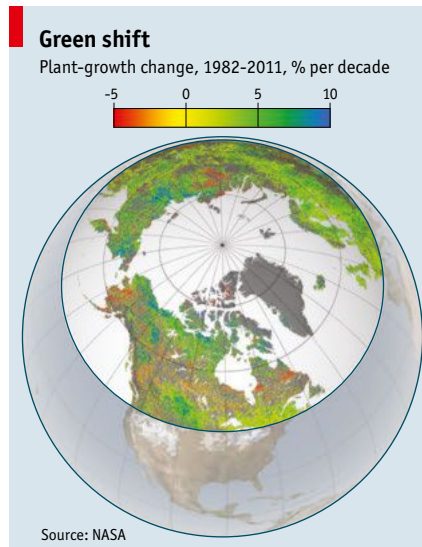
IN 1972, on their way to the Moon, the crew of Apollo 17 snapped what would become one of the most famous photographs ever taken. The “Blue Marble” shows Earth as it looks from space: a blue sphere overlaid by large brown swatches of land, with wisps of white cloud floating above.

But times change, and modern pictures of Earth look different. A wash of greenery is spreading over the globe, from central Africa to Europe and South East Asia. One measurement found that between 1982 and 2009 about 18m square kilometres of new vegetation had sprouted on Earth’s surface, an area roughly twice the size of the United States.

The growth in greenery is a consequence of climate change. As the planet heats up, places that were once too chilly for most plants to grow have become steadily more hospitable. That extra vegetation, in turn, exerts its own effects on the climate. According to a team led by Trevor Keenan of the Lawrence Berkeley National Laboratory, in California, who have just published their findings in *Nature Communications*, the plant growth caused by climate change may also be helping to slow it—at least for now.

In 2014 humans pumped about 35.7bn tonnes of carbon dioxide into the air. That figure has been climbing sharply since the middle of the 20th century, when only about 6bn tonnes a year were emitted. As a consequence, the concentration of CO₂ in the atmosphere has been rising too, from about 311 parts per million (ppm) in 1950 to just over 400 in 2015. Yet the rate at which it is rising seems to have slowed since the turn of the century. According to Dr Keenan, between 1959 and 1989 the rate at which CO₂ levels were growing rose from 0.75ppm per year to 1.86. Since 2002, though, it has barely budged. In other words, although humans are pumping out more CO₂ than ever, less of it than you might expect is lingering in the air.

Filling the atmosphere with CO₂ is a bit like filling a bath without a plug: the level will rise only if more water is coming out of the taps than is escaping down the drain. Climate scientists call the processes which remove CO₂ from the air “sinks”. The oceans are one such sink. Photosynthesis by plants is another: carbon dioxide is converted, with the help of water and light energy from the sun, into sugars, which are used to make more plant matter,



locking the carbon away in wood and leaves. Towards the end of the 20th century around 50% of the CO₂ emitted by humans each year was removed from the atmosphere this way. Now that number seems closer to 60%. Earth’s carbon sinks seem to have become more effective, but the precise details are still unclear.

Using a mix of ground and atmospheric observations, satellite measurements and computer modelling, Dr Keenan and his colleagues have concluded that faster-growing land plants are the chief reason. That makes sense: as CO₂ concentrations rise, photosynthesis speeds up. Studies conducted in greenhouses have found that plants can photosynthesise up to 40% fast-

er when concentrations of CO₂ are between 475 and 600ppm.

For delegates at the latest round of UN climate talks, in Marrakech, that sounds like good news. But more vigorous photosynthesis is only slowing climate change. The effect is too small to reverse it. And it will not last, says Dr Keenan. Besides, there is more to growing plants than carbon dioxide. Take water: in a changing climate, wet bits of the world will probably become wetter while drier parts become drier. Extreme events—droughts and deluges—will intensify. Rainfall patterns may change, which could make some places less friendly to plants that now thrive there. And although plants benefit in the short term from extra CO₂, they suffer when temperatures get too high.

There will be more complicated effects, too. Much of the greening has occurred in cold spots (see map). Yet while ice and snow reflect sunlight, vegetation soaks it up, so more greenery in the north will eventually lead to yet more warming. That, in turn, could release large quantities of methane—a potent but short-lived greenhouse gas—from thawing tundra. Elsewhere, higher temperatures could kill tropical forests. According to one estimate, for every degree of warming, tropical forests may release greenhouse gases equivalent to five years’ worth of human emissions.

Indeed, some researchers think the effects of global greening may already be fizzling out. Every few years a climatic phenomenon called El Niño sees the tropical Pacific Ocean warm substantially, which tends to raise temperatures around the world. The most recent Niño, in 2015-16, was a whopper. Corinne Le Quééré, a climate researcher at the University of East Anglia in Britain says that means the world’s plants may have, therefore, become a less potent carbon sink than they were in the period studied by Dr Keenan’s team. Global greening, then, offers only a little breathing space. Kicking the fossil-fuel habit remains the only option. ■



A feast in the air



Literary history

Refugee avant la lettre

A new biography goes past the well-known surface to discover a young Kafka with strikingly modern concerns

Poor Franz Kafka. His lifetime being misunderstood by his family has been followed by an even longer literary after-life being misunderstood by the world. According to a new biography by Reiner Stach, Kafka was not the neurotic, world-removed writer of, say, Isaac Bashevis Singer's 1960s story, "A Friend of Kafka", in which a friend says Kafka's inhibitions "impeded him in everything". Nor was he scarred solely by a difficult relationship with his overbearing father, an idea that Alan Bennett's play "Kafka's Dick" toyed with in the 1980s.

In "Kafka: The Early Years", the last instalment of a mighty, three-volume biography, Mr Stach pursues close description of Kafka's life and times rather than the "critical biography" approach combining biography and textual interpretation. What Mr Stach uncovers in this volume—written last because of a long struggle over access to documents—are the formative experiences of a Kafka who becomes new and surprisingly relevant.

"Readers... will find myths about Kafka exploded," writes Shelley Frisch in her translator's preface. Mr Stach himself lauds "the many pieces of the mosaic discovered by others", a half-century of academic discovery (about Kafka's first-rate work as an insurance clerk, for example) that Mr Stach now brings to a wider audience. Yet even those immersed in the specialist work benefit from the illumination that Mr Stach's

Kafka: The Early Years. By Reiner Stach. Translated by Shelley Frisch. Princeton University Press; 564 pages; \$35

detailed digging brings.

Kafka wrote his famous "Letter to His Father" in 1919, in which he took his father, Hermann, to account for his boorish ways with his son, who became beset by guilt and fear of punishment. But, as Mr Stach vividly shows, loneliness, not humiliation, was Kafka's first formative experience. Until he was four, his father and mother were busy in the family haberdashery shop 12 hours a day, six and a half days a week. Kafka learned that social relations were fraught and unstable—with great consequence for literature.

In Mr Stach's telling, this insecurity was compounded by threats that the observant and highly sensitive Kafka found in the world: an education system based on rigorous exams, and the risk of failing them; a society beset by tensions between Czechs and Germans, in which Jews were often the scapegoats; and new-fangled machines like aeroplanes, which both delighted and terrified the young author.

According to Mr Stach, guilt and punishment preoccupied Kafka from 1912—the year he wrote "The Metamorphosis", a groundbreaking story—until early 1915. But later works posed a new question: "What do people have to do to be accepted by a

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Economist.com/culture

group—and why are some never accepted?" For the biographer, this is precisely the theme of "The Castle", an unfinished novel that Mr Stach calls Kafka's most brilliant work, written two years before he died of tuberculosis in 1924, aged 40.

In today's age of backlash against globalisation, the arc that Mr Stach draws between "The Early Years" and Kafka's later life takes on a new significance. It traces the life of a misunderstood German-speaking Jew in a city run first by an Austrian emperor, then by assertively nationalist Czechs. "We move from guilt to the question of identity," Mr Stach says. "The question, 'Who am I?' is, after all, closely linked to, 'Where do I belong?'"

The bloody climax of nationalism that followed makes Kafka's story not a little poignant: he found a true home neither in life nor in death. The difficulty of writing "The Early Years" was a symptom of this. Mr Stach spent years trying to persuade the Israeli heirs of Max Brod, Kafka's friend and literary executor, who left Prague for Palestine in the 1930s, to let him read Brod's diaries. Though he will not say how, Mr Stach got hold of copies of three volumes, rendering new insights about Brod's and Kafka's world.

The Israeli Supreme Court recently ruled that the Brod manuscripts should be placed in the National Library. This is good news for the public, but ensures that Kafka will remain rootless: his and Brod's manuscripts will be scattered between Germany, Britain and Israel. And rootlessness breeds indifference. Vienna has neglected the sanatorium where Kafka died. Berlin has left commemoration of Kafka's time there to private initiatives. And the Czech government sees Kafka more as a tourist magnet than as a cultural icon. Mr Stach concludes that "No state feels responsible for him. That's absurd." ■

Turkey

Fault-lines upon fault-lines

Under the Shadow: Rage and Revolution in Modern Turkey. By Kaya Genc. *I.B. Tauris; 230 pages; £12.99. To be published in America in December*

Turkey: The Insane and the Melancholy. By Ece Temelkuran. Translated by Zeynep Beler. *Zed Books; 296 pages; \$19.95 and £12.99*

ISTANBUL is an achingly beautiful city, bridging past and future, loss and longing. The Turkish word most closely associated with it is *hüzün*, a melancholic and paralysing nostalgia. But more than nostalgia is needed to render the way both city and country have begun to come apart in recent years as the social fabric holding them together has frayed.

In strikingly different ways, two books, one by Kaya Genc, a novelist and essayist, and the other by Ece Temelkuran, a journalist, rise to this challenge and chronicle the changes that have convulsed Turkey since the current president, Recep Tayyip Erdogan, came to power.

Turkey has always been divided, frequently violently so. But under Mr Erdogan, the slide into angry polarisation has been especially traumatic. The president has set about rewriting the country's foundation myths. For nearly a century, the national story has been that Mustafa Kemal Atatürk, in the wake of the first world war and the demise of the Ottoman empire, dragged a backwards Turkey towards Western-facing nationalism and secularism. Mr Erdogan begs to differ. He tells his countrymen that Turkey has always been a pious and conservative country, and that he intends to drag it back from the excesses of Kemalism.

It is difficult to keep pace with Turkey these days. Both "Under the Shadow" and "Turkey: The Insane and the Melancholy" were written after the Gezi Park protests in 2013, when opposition to Mr Erdogan exploded onto the streets of Istanbul and other cities. The books were finished before the failed coup in July, although published afterwards. And it is striking that despite their otherwise astute analyses of Turkey's divisions, both writers only hint at the fissure between religious conservatives that would play a role in the coup and its aftermath. Mr Erdogan blames Fethullah Gülen, a cleric based in America, for the coup, which Mr Erdogan has since used as an excuse for a wide-ranging crackdown. No one (the authors here are no exception) saw this coming.

Ms Temelkuran, at times playful, but more often polemical, surveys the waste-

land of the 1960s, 1970s and 1980s, when Turkey suffered three military coups, and she excoriates the current administration for dragging the country back to the brink of collapse. This is personal for her, having been fired as a journalist for her criticisms of the government. But anger at times blunts her analysis and it robs her of political traction. She misreads the reasons for the president's success, suggesting that he had won on grandiose promises to mend Turkey's view of its past, rather than on prosaic promises of stability and growth. And she hints obliquely at conspiracies ("the economy was flourishing with money suddenly pouring into the country from some obscure source"). She risks demonising as irrational or unethical all those who support the president. This is grist to Mr Erdogan's cynical mill. He makes a lot of his electoral mileage championing ordinary people against urban elites.

Whereas Ms Temelkuran seethes on the front line of Turkey's culture war, Mr Genc is a cartographer of the battlefield. "Under the Shadow" is built around a series of interviews with youthful students, activists, businesspeople and artists, "divided in politics but united in their passion". Mr Genc is refreshingly balanced; he gives as much attention to a man who came of political age listening to Mr Erdogan vow to vanquish the Gezi protests as he does to another who had helped spark the protests. If the book has a shortcoming it is that the author is too generous towards his subjects, allowing his own voice too little room. Mr Genc is a subtle guide to the wrenching changes Turkey is undergoing, and his personal testimony is rich in historical and cultural detail. More of his insights would have been welcome; he has announced himself here as a voice to be listened to as Turkey struggles to come to terms with itself. ■



Erdogan, keeping up with the Kemalists

Natural history

Omnivore's delight

The Man Who Ate the Zoo: Frank Buckland, Forgotten Hero of Natural History. By Richard Girling. *Chatto & Windus; 392 pages; £17.99*

ROAST giraffe, apparently, tastes a little like veal. A hedgehog, meanwhile, is "good and tender". Exhumed panther, however, comes with a weaker recommendation. One such beast, having died in a London zoo, been buried for a couple of days then dug up, was pronounced "not very good".

Frank Buckland was a 19th-century scientist, surgeon and culinary buccaneer who, as the title of this biography declares, "ate the zoo". That is to understate his achievements: Buckland ate much that no self-respecting zoo would consider for its cages, earwigs ("horribly bitter") being a particular low point.

The aim of this was not gastronomy but science. As a biologist and an optimist, Buckland wanted to find a new source of protein to help the world avoid the Malthusian doom that had been predicted a generation before. He had high hopes for horsemeat, but found quality control a problem. Having sampled a bad portion, he came to suggest it should be served in prisons as a deterrent to criminals.

The Victorians were intellectually omnivorous. Buckland's father was not only canon of Christ Church Cathedral in Oxford but also the university's first professor of geology and a passionate amateur biologist. (The senior Buckland also, according to legend, visited a country house containing in a silver casket the heart of a French king, which he promptly gobbled up.) The younger Buckland grew up in a home resembling the Caucus Race in "Alice in Wonderland" more than a house in a college cloister: turtle, bear and mouse all appeared in the family home to be studied, dissected—and eaten. The big beasts of science, too, roamed through: Michael Faraday, Baron von Bunsen and Isambard Kingdom Brunel all visited.

Buckland was as polymathic as any. When not dining he would work as a surgeon, advise Queen Victoria on how to rid herself of a plague of frogs and become one of the most popular science writers of his era. And what an era it was. When Buckland was born in 1826, the genesis of humanity was considered adequately explained in the Book of Genesis. By the time he died Darwin's theory of evolution was spreading rapidly, and the long withdrawing roar of faith was audible.

Buckland, however, continued to see ►►

▶ the hand of Creation in every creature. Perhaps it was this that inspired him to defend them. The word “conservationist” didn’t exist yet, but Buckland relentlessly defended God’s creatures. Horrified by seal culls, he wrote a powerful account of one in which it was explained that the pup’s cry “is very like that of a human infant”.

The state of Britain’s waterways appalled him. He found salmon rivers polluted by gasworks, lead, sewage and coal dust. As he wrote with disgust, manufacturers “seem to think that rivers are convenient channels kindly given them by nature to carry away...the refuse of their works”. This, a century before the modern environmental movement, was Buckland’s silent spring.

He would revolutionise the way that Britain saw nature. When he died in 1880, national newspapers joined in a chorus of lamentations that would have “done justice to an emperor”. History, which prefers its scientists to be prophets rather than relics, has been less kind. Partly because of his creationism, Buckland has been forgotten. Today he does not even merit a mention in the “Encyclopaedia Britannica”. This brilliantly entertaining biography argues persuasively why his memory, too, is worthy of conservation. ■

A literary life

Cartergraphy

The Invention of Angela Carter: A Biography. By Edmund Gordon. *Chatto & Windus*; 525 pages; £25. To be published in America by Oxford University Press in March

READERS and critics have tended to pierce the geonhole Angela Carter, or reshape her in their own image. Undergraduates often reduce the British novelist, whose stories are known for their magical realism and striking female characters, to a mouthpiece of feminism. Tributes when she died in 1992, at just 51, cast her as a “fairy queen”, a “benevolent white witch” and a “fairy god-mother”. The novelist loathed being appropriated or misinterpreted; when an editor, believing Carter to be “an Earth mother”, asked her to write about the summer solstice at Stonehenge, she said: “You just haven’t got me, have you dear?”

The true Carter emerges from the pages of Edmund Gordon’s expansive new biography thanks to a huge body of journals and letters. Her mother was infantilising, prudish and smothering; her father was a loquacious and much-loved journalist who treated Angela to expensive gifts, dresses and “a succession of cats”. Putty in his daughter’s hands, her father, Carter



Not your Earth-mother type

complained in 1983, “did not prepare [her] well for patriarchy”. At 17, Angela rebelled by taking up smoking, wearing tight skirts and swearing “openly and elaborately” (a colleague at the *Croydon Advertiser* said that he had “never heard a woman use the f-word in [his] life, but Angie did it all the time”). This early life—particularly the claustrophobic relationship with her mother—left an imprint upon her writing. In “The Christchurch Murder”, based on a true story, she considered why a teenager might be driven to matricide.

Carter felt that writing was a means to ask questions, “not to provide answers”. Her relationship with the feminist movement was one of “[sniping] from the sidelines” rather than active involvement. Her ego was stung by repeated snubs for the Booker prize, Britain’s biggest award for fiction. She hated being reduced to a “woman writer”, but felt deep down that men such as Salman Rushdie and Ian McEwan were “very much more famous and very much richer and also regarded as...the right stuff”. Carter was kind and thoughtful, often championing emerging writers, but also capable of incredible cruelty and ugliness. She wished that the wife of one of her lovers would “kill or try to kill herself”.

Mr Gordon is especially strong on the myriad influences on Carter’s writing, all the while noting her uniqueness. “Shadow Dance” bears a “Nabokovian hue”, “The Magic Toyshop” grew out of a single line in André Breton’s “First Surrealist Manifesto”, and Manhattan in the time of the Black Panthers and the Stonewall riots offered the dystopian backdrop for “The Passion of New Eve”. Mr Gordon calls much of her work “symbolic autobiography”. She found it funny that no one thought to read her in the character of Lee in “Love”: “I

even put in clues like knocking out his front tooth, dammit, and nobody guessed!”

Yet there are some disappointing omissions. There is no explanation or suggestion as to why Carter returned again and again to certain images—the Greek myth of Leda and the swan, for example. Conversely, some of the detail can swerve into tedium; the reader is informed not only that Carter paid \$300 a month in rent when living in Providence, Rhode Island, but that the figure included utilities. Mr Gordon makes a grating imaginative leap by suggesting that Carter’s support for four female writers aged between 60 and 80 is symbolic of a “new-found peace with the idea of motherhood”.

These are momentary flaws. Mr Gordon’s elegant blending of research, analysis and Carter’s own testimony is all the more impressive given that this is his debut book. It is surprising, too, that Mr Gordon’s is the first full-length biography of Carter, whose novels continue to populate *Vintage Classics*’ bestseller list. She once wondered why “anyone [should] be interested in my boring, alienated, marginal, messy life”. Reading this book, it seems clear that more readers and biographers should devote their time to this complex, intelligent and thoroughly un-boring woman. ■

Glenda Jackson in “King Lear”

Wielding the matter

A triumphant return to the stage in one of Shakespeare’s most demanding roles

GLEND A JACKSON was among the finest actors of her generation when, at 55, she left the stage and stood for parliament. Elected in 1992, she spent 23 mostly sterile years as a left-wing backbencher, best remembered for a bitter attack on Margaret Thatcher shortly after the former prime minister’s death. “A woman? Not on my terms,” Ms Jackson thundered. Watching her speech with hindsight, it is easy to detect a regal fury that could be an audition for Shakespeare’s “King Lear”.

Good female actors, sometimes frustrated by the shortage of meaty parts for them, are moving into the great roles written for men. London’s Donmar Warehouse is currently staging three Shakespeare plays acted entirely by a company of women, led by Harriet Walter. In 2014, Maxine Peake was a well-regarded Hamlet in Manchester’s Royal Exchange Theatre. After Ms Jackson left the House of Commons, she was tempted back to the stage at the age of 80 by seeing Núria Espert, a celebrated Catalan actress, playing Lear.

Every ambitious actor feels compelled ▶▶

▶ to attempt this Everest of roles, a tragedy of old age and betrayal, and madness and cruelty. The part requires the widest range of emotions imaginable. Lear expects to have his own way, and his temper rages when he does not get it. (There may be an element of typecasting in Ms Jackson's case.) Ms Jackson's decision to tackle the part has been the talk of the London theatre: Did she still have the stamina? Would she look like a man, or a woman?

She dresses in a woman's cardigan and black trousers, and occasionally a fetching red coat. When, in Lear's madness, she takes off her trousers, she reveals spindly

thighs. But there is still strength in her unmistakable voice, and she has the energy to sustain the three-hour performance with power and precision. Lear's rage comes naturally to her, but there is a moving softness and humour in her mad scenes. What is missing is the depth of emotion at Cordelia's death, which ought to have the audience in tears. But critics have generally been impressed.

Deborah Warner, the director, anchors the play in the present. Lear's court sits on blue plastic chairs, and the background noises include a reversing lorry. The Duke of Albany carries the *Spectator*, a shopping

trolley makes its now almost obligatory appearance, and Lear's Fool is dressed in a ragged Superman outfit. When Gloucester's eyes are gouged out (by an electric drill) one of the eyeballs is thrown into the audience, provoking nervous laughter at precisely the wrong time for a theatrical joke. Some of the verse is garbled, and the noisy storm made by billowing black refuse bags drowns Lear's "Blow winds, and crack your cheeks." Not all the performers rise to the occasion, but what really counts is Glenda Jackson's compelling start to the last act of a dramatic life. In a memorable comeback, she commands the stage. ■

Johnson | Doing by talking

People can change the world with "mere" words—especially powerful people

POLITICIANS like to promise action, not words. But this is odd: when was the last time a political leader did anything important with a physical action? Monarchs no longer lead armies into battle on horseback. Modern politicians stay safely at home. They give speeches, which they hope will make people vote for them. Once elected, their job is to give yet more speeches, have private meetings, engage in debates and maybe write the occasional opinion article.

In other words, a lot of words. It is fair to say that pretty much the entire job of a politician, unlike that of a woodworker or surgeon, is to talk, not to perform what might traditionally be called "action". But this does not mean that politicians do nothing. There is a particular kind of speech that philosophers and linguists call "speech acts", described by J.L. Austin in his book "How to Do Things with Words", published in 1962.

Austin distinguished "locution", the act of speaking itself, from "illocution": the thing done in the world by that act. A classic distinction is a request phrased in the form of a question: "Can you shut the window?" It seems to be about the listener's ability to shut the window, but the illocutionary act tells the listener to shut the window. Speech acts come stronger than that, too. People can commit themselves to a proposition, or promise a future action: "I promise I didn't steal it" commits the speaker to being branded a liar if something else turns out to be the case. And "I swear to tell the truth, the whole truth and nothing but the truth" commits the speaker in court to accepting charges for perjury for doing otherwise.

Some people are authorised to change the state of the world itself through speech. A minister can marry two people with the words, "I now pronounce you

man and wife." A judge can say, "I sentence you to three years in prison." A traditional test is that if you can insert "hereby" into a sentence, you are performing a kind of direct-effect speech act.

But one group of people can perform an especially powerful kind of speech act. Heads of government do so when they speak about the policies of their countries. Since they set those policies, everything out of their mouths can be taken as something between the promise of an ordinary person, and a speech act with direct effect. These are taken by listeners as "I hereby commit my country to the following course of action."

The world has been shaken by the election of Donald Trump to the American presidency because he has been saying things for a year and a half that seem to commit America to radical new policies: an abandonment of NATO allies who do not pay more for their protection, an end to

free trade and the killing of terrorists' family members. Many such things will be under his direct control as president.

The more level-headed supporters of the president-elect like to defend him by saying that he often speaks with a hidden wink. In other words, don't take these as literal promises—speech acts—at all. He was a successful reality-show entertainer, after all. Another philosopher has described what might be considered Mr Trump's signature style: Harry Frankfurt's book "On Bullshit" described speech that, distinct from lying, is a kind of performance in which the speaker isn't even concerned about the truth of what he says. Mr Trump himself used this "locker-room talk" defence after a video showed him bragging about groping women.

Now he is the president-elect. His first act was to give an unusually measured speech in which he promised reconciliation at home, and said that "we will get along with all other nations willing to get along with us." As he assembles his administration, he needs to know that the world has already taken a lot of what he has said as terrifying promises. Which Donald Trump will take office in January? The one who continually went off on reckless and damaging tangents during campaign speeches? Or the one who gave his victory speech?

It was reported that Mr Trump's staff had taken control of his Twitter account from him late in the campaign. He also stopped committing major outrages in speeches and, probably not coincidentally, he soon began to close in the polls. His staff seems to have convinced him that his spontaneous speech was his own worst enemy. It is far from clear he will take that lesson to the White House, where the world will take his words as deeds, and respond accordingly.



Economic data

% change on year ago

	Gross domestic product			Industrial production	Consumer prices		Unemployment	Current-account balance		Budget balance	Interest rates, %	Currency units, per \$	
	latest	qtr*	2016 ⁱ	latest	latest	2016 ⁱ	rate, %	latest 12 months, \$bn	% of GDP 2016 ⁱ	% of GDP 2016 ⁱ	10-year gov't bonds, latest	Nov 9th	year ago
United States	+1.5 Q3	+2.9	+1.5	-1.0 Sep	+1.5 Sep	+1.3	4.9 Oct	-488.2 Q2	-2.6	-3.2	1.86	-	-
China	+6.7 Q3	+7.4	+6.7	+6.1 Sep	+2.1 Oct	+2.0	4.0 Q3 [§]	+266.6 Q3	+2.7	-3.8	2.51 ^{§§}	6.77	6.36
Japan	+0.8 Q2	+0.7	+0.6	+0.9 Sep	-0.5 Sep	-0.2	3.0 Sep	+179.4 Sep	+3.6	-5.1	-0.06	105	123
Britain	+2.3 Q3	+2.0	+2.0	+0.3 Sep	+1.0 Sep	+0.6	4.9 Jul ^{††}	-161.2 Q2	-5.7	-3.9	1.23	0.80	0.66
Canada	+0.9 Q2	-1.6	+1.2	-0.1 Aug	+1.3 Sep	+1.6	7.0 Oct	-51.1 Q2	-3.4	-2.7	1.37	1.34	1.33
Euro area	+1.6 Q3	+1.4	+1.5	+1.8 Aug	+0.5 Oct	+0.2	10.0 Sep	+383.9 Aug	+3.2	-1.7	0.21	0.91	0.93
Austria	+1.2 Q2	-0.9	+1.3	+2.3 Aug	+0.9 Sep	+0.9	6.3 Sep	+8.2 Q2	+2.6	-1.4	0.39	0.91	0.93
Belgium	+1.3 Q3	+0.8	+1.3	+1.0 Aug	+1.8 Oct	+1.8	8.0 Sep	+4.8 Jun	+1.2	-2.8	0.49	0.91	0.93
France	+1.1 Q3	+0.9	+1.3	+0.5 Aug	+0.4 Oct	+0.3	10.2 Sep	-34.1 Sep [‡]	-0.6	-3.3	0.49	0.91	0.93
Germany	+1.7 Q2	+1.7	+1.7	+1.1 Sep	+0.8 Oct	+0.4	6.0 Oct	+302.9 Sep	+8.6	+0.9	0.21	0.91	0.93
Greece	-0.4 Q2	+0.7	-0.6	+0.1 Sep	-1.0 Sep	-0.1	23.2 Jul	-0.3 Aug	-1.0	-5.8	7.41	0.91	0.93
Italy	+0.7 Q2	+0.1	+0.8	+4.1 Aug	-0.1 Oct	nil	11.7 Sep	+46.3 Aug	+2.4	-2.6	1.74	0.91	0.93
Netherlands	+2.3 Q2	+2.6	+1.6	+2.4 Sep	+0.1 Sep	+0.2	7.0 Sep	+59.7 Q2	+8.5	-1.2	0.29	0.91	0.93
Spain	+3.2 Q3	+2.8	+3.1	+1.2 Sep	+0.6 Oct	-0.4	19.3 Sep	+23.4 Aug	+1.4	-4.3	1.25	0.91	0.93
Czech Republic	+3.6 Q2	+3.7	+2.4	+2.7 Sep	+0.8 Oct	+0.5	5.0 Oct [§]	+3.7 Q2	+1.5	nil	0.52	24.7	25.2
Denmark	+0.8 Q2	+1.5	+1.0	-4.6 Sep	nil Sep	+0.3	4.2 Sep	+23.6 Sep	+7.3	-1.0	0.31	6.80	6.94
Norway	+2.5 Q2	+0.1	+1.0	-13.7 Sep	+3.6 Sep	+3.5	4.9 Aug ^{††}	+23.6 Q2	+5.3	+3.0	1.41	8.32	8.66
Poland	+3.0 Q2	+3.6	+3.0	+3.2 Sep	-0.2 Oct	-0.8	8.2 Oct [§]	-2.7 Aug	-0.4	-2.7	3.15	3.97	3.96
Russia	-0.6 Q2	na	-0.8	-0.8 Sep	+6.1 Oct	+7.0	5.2 Sep [§]	+30.2 Q3	+2.7	-3.7	8.49	64.0	64.5
Sweden	+3.4 Q2	+2.0	+3.2	+1.5 Sep	+0.9 Sep	+1.0	6.1 Sep [§]	+25.4 Q2	+5.0	-0.3	0.26	9.07	8.69
Switzerland	+2.0 Q2	+2.5	+1.4	-1.2 Q2	-0.2 Oct	-0.4	3.3 Oct	+66.1 Q2	+8.9	+0.2	-0.32	0.98	1.00
Turkey	+3.1 Q2	na	+3.1	-4.1 Sep	+7.2 Oct	+7.9	10.7 Jul [§]	-31.0 Aug	-4.8	-1.8	10.42	3.24	2.92
Australia	+3.3 Q2	+2.1	+2.8	+3.7 Q2	+1.3 Q3	+1.3	5.6 Sep	-52.8 Q2	-3.7	-2.1	2.17	1.31	1.42
Hong Kong	+1.7 Q2	+6.5	+1.6	-0.4 Q2	+2.6 Sep	+2.7	3.4 Sep ^{††}	+13.6 Q2	+3.0	+0.1	1.07	7.76	7.75
India	+7.1 Q2	+5.5	+7.6	-0.7 Aug	+4.3 Sep	+5.0	5.0 2015	-16.2 Q2	-0.9	-3.8	6.67	66.5	66.4
Indonesia	+5.0 Q3	na	+5.0	+0.5 Sep	+3.3 Oct	+3.6	5.6 Q3 [§]	-18.7 Q2	-2.2	-2.6	7.36	13,099	13,648
Malaysia	+4.0 Q2	na	+4.3	+4.9 Aug	+1.5 Sep	+1.9	3.5 Sep [§]	+5.3 Q2	+1.0	-3.4	3.66	4.23	4.37
Pakistan	+5.7 2016**	na	+5.7	+1.5 Aug	+4.2 Oct	+3.9	5.9 2015	-4.1 Q3	-0.8	-4.6	8.03 ^{†††}	105	105
Philippines	+7.0 Q2	+7.4	+6.4	+9.9 Sep	+2.3 Oct	+1.7	5.4 Q3 [§]	+3.2 Jun	+1.1	-1.0	4.69	48.6	47.2
Singapore	+2.0 Q2	-4.1	+1.0	+6.7 Sep	-0.2 Sep	-0.7	2.1 Q3	+58.4 Q2	+19.4	+0.7	1.94	1.40	1.42
South Korea	+2.7 Q3	+2.8	+2.7	-2.0 Sep	+1.3 Oct	+1.0	3.4 Oct [§]	+98.5 Sep	+7.2	-1.3	1.68	1,149	1,157
Taiwan	+2.1 Q3	+4.5	+0.7	+5.0 Sep	+1.7 Oct	+1.1	3.9 Sep	+75.7 Q2	+13.3	-0.5	0.96	31.5	32.6
Thailand	+3.5 Q2	+3.2	+3.0	+0.6 Sep	+0.3 Oct	+0.2	0.9 Sep [§]	+47.4 Q3	+5.9	-2.5	2.35	34.9	36.0
Argentina	-3.4 Q2	-8.0	-1.7	-2.5 Oct	— ***	—	9.3 Q2 [§]	-15.4 Q2	-2.4	-5.0	na	15.0	9.58
Brazil	-3.8 Q2	-2.3	-3.2	-4.9 Sep	+7.9 Oct	+8.2	11.8 Sep [§]	-23.3 Sep	-1.1	-6.4	11.45	3.23	3.79
Chile	+1.5 Q2	-1.4	+1.7	-0.2 Sep	+2.8 Oct	+3.9	6.8 Sep ^{§††}	-5.1 Q2	-1.9	-2.5	4.21	651	702
Colombia	+2.0 Q2	+0.8	+2.0	+9.4 Aug	+6.5 Oct	+7.6	8.5 Sep [§]	-15.7 Q2	-5.1	-3.7	7.30	3,017	2,924
Mexico	+2.5 Q2	-0.7	+2.1	+0.3 Aug	+3.1 Oct	+2.9	3.9 Sep	-30.9 Q2	-2.9	-3.0	6.55	20.0	16.9
Venezuela	-8.8 Q4~	-6.2	-14.2	na	na	+485	7.3 Apr [§]	-17.8 Q3~	-3.0	-24.3	10.57	9.99	6.31
Egypt	+6.7 Q1	na	+4.4	-13.1 Aug	+14.1 Sep	+12.8	12.5 Q2 [§]	-18.7 Q2	-6.8	-11.5	na	17.6	8.03
Israel	+2.8 Q2	+4.3	+3.0	+5.4 Aug	-0.4 Sep	-0.5	4.9 Sep	+12.1 Q2	+3.3	-2.4	1.93	3.82	3.93
Saudi Arabia	+3.5 2015	na	+1.1	na	+3.0 Sep	+4.2	5.6 2015	-61.5 Q2	-5.6	-11.6	na	3.75	3.75
South Africa	+0.6 Q2	+3.3	+0.4	+0.1 Aug	+6.1 Sep	+6.1	26.6 Q2 [§]	-12.9 Q2	-4.1	-3.4	8.83	13.6	14.3

Source: Haver Analytics. *% change on previous quarter, annual rate. [†]The Economist poll or Economist Intelligence Unit estimate/forecast. [§]Not seasonally adjusted. [‡]New series. ~2014 **Year ending June. ^{††}Latest 3 months. ^{†††}3-month moving average. ^{§§§}5-year yield. ***Official number not yet proved to be reliable; The State Street PriceStats Inflation Index, Sept 35.92%; year ago 26.47% ^{†††}Dollar-denominated bonds.

Markets

	Index Nov 9th	% change on		
		one week	Dec 31st 2015	
			in local currency	in \$ terms
United States (DJIA)	18,589.7	+3.5	+6.7	+6.7
China (SSEA)	3,275.5	+0.8	-11.6	-15.2
Japan (Nikkei 225)	16,251.5	-5.2	-14.6	-1.8
Britain (FTSE 100)	6,911.8	+1.0	+10.7	-6.5
Canada (S&P/TSX)	14,759.9	+1.1	+13.5	+17.2
Euro area (FTSE Euro 100)	1,037.9	+2.2	-5.2	-4.4
Euro area (EURO STOXX 50)	3,056.3	+2.6	-6.5	-5.7
Austria (ATX)	2,486.5	+2.4	+3.7	+4.5
Belgium (Bel 20)	3,538.9	+2.4	-4.4	-3.6
France (CAC 40)	4,543.5	+2.9	-2.0	-1.3
Germany (DAX)*	10,646.0	+2.7	-0.9	-0.1
Greece (Athex Comp)	581.9	+0.1	-7.8	-7.1
Italy (FTSE/MIB)	16,799.9	+2.0	-21.6	-21.0
Netherlands (AEX)	454.4	+2.4	+2.8	+3.6
Spain (Madrid SE)	897.1	+0.2	-7.1	-6.3
Czech Republic (PX)	897.8	-0.6	-6.1	-5.4
Denmark (OMXCXB)	747.7	-1.3	-17.5	-16.7
Hungary (BUX)	30,365.2	+2.9	+26.9	+32.2
Norway (OSEAX)	702.0	+1.8	+8.2	+15.1
Poland (WIG)	48,214.7	+0.7	+3.8	+3.2
Russia (RTS, \$ terms)	990.4	+1.8	+14.7	+30.8
Sweden (OMXS30)	1,456.7	+2.8	+0.7	-6.4
Switzerland (SMI)	7,897.8	+2.6	-10.4	-8.7
Turkey (BIST)	76,208.9	-1.2	+6.2	-4.1
Australia (All Ord.)	5,238.3	-1.4	-2.0	+2.8
Hong Kong (Hang Seng)	22,415.2	-1.7	+2.3	+2.2
India (BSE)	27,252.5	-1.0	+4.3	+3.8
Indonesia (JSX)	5,414.3	+0.2	+17.9	+24.1
Malaysia (KLSE)	1,647.6	-0.7	-2.7	-1.1
Pakistan (KSE)	42,203.6	+1.1	+28.6	+28.7
Singapore (STI)	2,789.9	-0.6	-3.2	-1.6
South Korea (KOSPI)	1,958.4	-1.0	-0.1	+1.9
Taiwan (TWI)	8,943.2	-2.1	+7.3	+11.9
Thailand (SET)	1,509.4	+0.7	+17.2	+20.7
Argentina (MERV)	17,024.9	+1.3	+45.8	+25.7
Brazil (BVSP)	63,258.3	-0.1	+45.9	+78.5
Chile (IGPA)	21,424.8	+0.6	+18.0	+28.5
Colombia (IGBC)	10,057.3	-0.8	+17.7	+23.8
Mexico (IPC)	47,390.7	+0.2	+10.3	-4.6
Venezuela (IBC)	20,763.1	+36.5	+42.3	na
Egypt (Case 30)	10,225.5	+20.0	+46.0	-33.7
Israel (TA-100)	1,233.3	+1.3	-6.2	-4.4
Saudi Arabia (Tadawul)	6,379.6	+6.5	-7.7	-7.6
South Africa (JSE AS)	50,977.9	+1.2	+0.6	+14.6

The Economist poll of forecasters, November averages (previous month's, if changed)

	Real GDP, % change				Consumer prices		Current account		
	Low/high range		average		% change		% of GDP		
	2016	2017	2016	2017	2016	2017	2016	2017	
Australia	2.0/3.1	1.9/3.2	2.8	2.8	1.3 (1.2)	2.1 (2.2)	-3.7 (-4.2)	-3.2 (-3.7)	
Brazil	-3.6/-2.5	0.5/1.7	-3.2	1.1 (1.2)	8.2 (8.3)	5.4 (5.5)	-1.1	-1.3	
Britain	1.8/2.1	-0.5/1.4	2.0 (1.8)	0.9 (0.7)	0.6 (0.7)	2.6 (2.3)	-5.7 (-5.6)	-4.3 (-4.5)	
Canada	1.0/1.4	1.2/2.4	1.2 (1.3)	1.9	1.6	2.0 (1.9)	-3.4 (-3.3)	-3.0 (-2.9)	
China	6.4/6.8	6.0/6.7	6.7 (6.6)	6.4 (6.3)	2.0	2.0 (1.9)	2.7 (2.6)	2.6 (2.5)	
France	1.2/1.4	0.9/1.5	1.3	1.2	0.3	1.1	-0.6 (-0.4)	-0.6 (-0.5)	
Germany	1.4/2.0	1.0/1.9	1.7	1.3	0.4	1.5 (1.4)	8.6 (8.4)	7.9 (7.8)	
India	7.3/7.8	6.1/8.3	7.6	7.5 (7.7)	5.0 (5.2)	5.2	-0.9 (-1.0)	-1.1 (-1.3)	
Italy	0.7/0.9	0.3/1.3	0.8	0.8 (0.7)	nil	1.0 (0.9)	2.4 (2.5)	2.3 (2.0)	
Japan	0.5/0.7	0.4/1.2	0.6	0.9	-0.2	0.5 (0.6)	3.6	3.2	
Russia	-2.1/-0.5	0.4/2.6	-0.8 (-0.7)	1.3 (1.4)	7.0 (7.3)	5.2 (5.5)	2.7 (3.1)	3.3 (3.5)	
Spain	2.7/3.2	1.5/2.7	3.1 (3.0)	2.1	-0.4	1.2	1.4	1.2 (1.1)	
United States	1.3/1.7	1.3/2.6	1.5	2.1	1.3	2.3 (2.1)	-2.6	-2.7	
Euro area	1.4/1.6	1.0/1.5	1.5	1.3	0.2	1.3	3.2	3.0 (2.9)	

Sources: Bank of America, Barclays, BNP Paribas, Citigroup, Commerzbank, Credit Suisse, Decision Economics, Deutsche Bank, EIU, Goldman Sachs, HSBC Securities, ING, Itaú BBA, JPMorgan, Morgan Stanley, Nomura, RBS, Royal Bank of Canada, Schroders, Scotiabank, Société Générale, Standard Chartered, UBS. For more countries, go to: Economist.com/markets

Other markets

	Index Nov 9th	% change on		
		one week	Dec 31st 2015	
			in local currency	in \$ terms
United States (S&P 500)	2,163.3	+3.1	+5.8	+5.8
United States (NAScomp)	5,251.1	+2.8	+4.9	+4.9
China (SSEB, \$ terms)	344.9	+0.3	-15.6	-19.1
Japan (Topix)	1,301.2	-4.9	-15.9	-3.2
Europe (FTSEurofirst 300)	1,343.6	+2.7	-6.5	-5.8
World, dev'd (MSCI)	1,696.5	+1.4	+2.0	+2.0
Emerging markets (MSCI)	880.1	-1.1	+10.8	+10.8
World, all (MSCI)	410.9	+1.1	+2.9	+2.9
World bonds (Citigroup)	930.1	-1.4	+6.9	+6.9
EMBI+ (JPMorgan)	792.8	-0.4	+12.6	+12.6
Hedge funds (HFRX)	1,177.9 ¹	+0.1	+0.3	+0.3
Volatility, US (VIX)	14.4	+19.3	+18.2 (levels)	
CDSs, Eur (iTRAXX) ¹	72.9	-3.5	-5.4	-4.7
CDSs, N Am (CDX) ¹	74.5	-6.9	-15.7	-15.7
Carbon trading (EU ETS) €	6.1	-5.8	-26.1	-25.5

Sources: Markit; Thomson Reuters. ¹Total return index.

¹Credit-default-swap spreads, basis points. ²Nov 8th.

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The Economist commodity-price index

2005=100

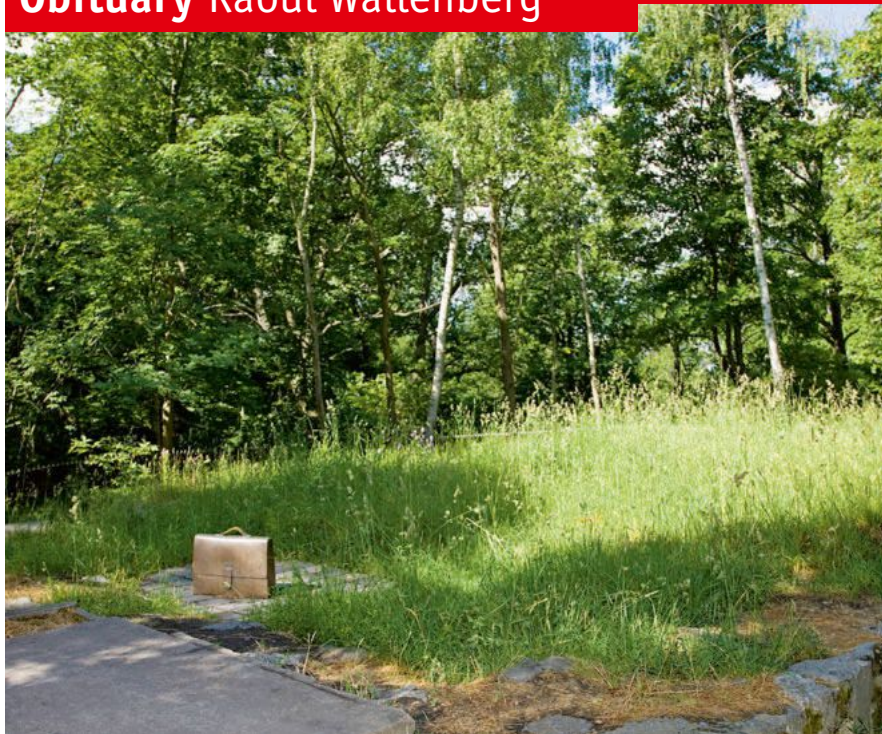
2005=100

			% change on	
	Nov 1st	Nov 8th *	one month	one year
Dollar Index				
All Items	138.7	140.7	+3.3	+9.9
Food	156.2	158.1	+3.1	+5.9
Industrials				
All	120.5	122.6	+3.6	+15.9
Nfa ¹	126.5	128.4	+1.5	+18.2
Metals	118.0	120.1	+4.6	+14.9
Sterling Index				
All items	206.4	206.3	+1.8	+33.9
Euro Index				
All items	156.2	158.4	+3.4	+6.4
Gold				
\$ per oz	1,288.8	1,281.1	+1.9	+17.4
West Texas Intermediate				
\$ per barrel	46.7	45.0	-11.4	+1.7

Sources: Bloomberg; CME Group; Cotlook; Darmann & Curl; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. ¹Provisional

¹Non-food agriculturals.

Obituary Raoul Wallenberg



The persistence of hope

Raoul Wallenberg, saviour of the Jews of Budapest, was at last officially declared dead on October 26th

BRONZE replicas of his briefcase, stamped “RW”, are scattered across the world. One stands on Lidingö island near Stockholm, on the grassed-over foundations of the summer house where he was born. Others wait at the Holocaust memorial outside Nottingham, and by the United Nations in New York. In Budapest one has been left on a bench, as if at any moment Raoul Wallenberg, with his long coat, receding hairline and dark, burning eyes, will hurry past and retrieve it.

With the blue-and-yellow “protection passes” he carried in that briefcase, a diplomat’s bluff made “authentic” with Swedish government stamps and decorative Swedish crowns, he saved the lives of thousands of Jews in Nazi-occupied Hungary in a mere five-month tour in 1944. In the 31 safe houses he set up round Budapest, decked with huge Swedish flags, he fed, clothed and cared for thousands more. As a result he was made a citizen of Canada, Israel, Australia and the United States; awards and institutes were set up in his honour, and streets and parks named after him. Yet the many memorials to him lack one thing, a date of death. In 1945, aged 32, he disappeared; and ever after the world refused to let him go.

The last public sighting was with Russian soldiers round him and, in his hand,

the briefcase, containing his plan to save more Jews. He was sent to prison in Russia, ending up in the Lubyanka in Moscow, where no file was kept on him, because (though he may have been a CIA asset) there was no case against him. The prison doctor claimed he died of a heart attack on July 17th 1947. But the doctor’s report had oddities about it, and was not believed. Another Russian officer said he had been shot. But a cleaning woman claimed to have seen him after that date; another prisoner said he had talked to a “Wallenberg” whose shadowy face he could not see; in 1951 an Italian reported that he had been in the next cell. In 1961 came a startling claim that he was alive, though weak, in a Soviet mental institution.

Emptying the trucks

Mystery was fortified by the cold war. The Russians would not co-operate to solve it until *glasnost*, in the 1990s, began to melt the ice. The Swedish government, too, was not keen to risk reviving scrutiny of its wartime behaviour, when the heroism of Wallenberg would be contrasted with pro-Nazi collaboration. Both countries would have preferred to let him lie. But without a date of death, that was impossible.

Besides, to those he had saved and their families, he was still alive. There was no

forgetting the charismatic young Swede who had climbed onto cattle trucks bound for Auschwitz, kicked the doors open and handed out his passes, under the rifle fire of the astonished guards, to anyone who could grab one. There was no forgetting his ferocious arguments with the soldiers who, beside the Danube, were preparing to kill Jews and dump them in the river; these, too, he saved. His motto, from a letter home, was “happy to fight”.

To those who never saw him, he became a saviour angel and a legend; he was surely one of the 36 “hidden saints” who helped hard-pressed Jews in each generation. In Budapest several of his safe-houses survive on the streets where he walked, unsleeping, intent to save “as many as possible”. Well into this century, descendants of the saved still wanted to kiss his cheek, hug him and thank him.

But the refusal to think him dead was mostly shouldered by his family. For 30 years his mother Maj and his stepfather, Fredrik von Dardel, harried the Russian and Swedish governments. They sent letters to their “dear, beloved Raoul”, via officials, assuring him that his room was ready for him. Fresh flowers were placed daily beside his photograph. When in 1979 yet another lead proved fruitless, they committed suicide, leaving the instruction that the search for news should last until 2000. For Raoul was still legally alive.

Their son Guy and daughter Nina, Wallenberg’s step-siblings, took the task on, assembling a 50,000-page archive about Raoul. For Guy’s children, too, the lost man was a presence: a dark cloud over the family, even at mealtimes or on outings to the beach. Nina clung to the thought that one day, back home, Raoul would take his tin soldiers out of their boxes and enjoy arranging them again. Guy, hopeful in 1989 that he might find him on a visit to Moscow—even if mad or ill—practised singing “Baa Baa black sheep”, their childhood song, in case Raoul would recognise it.

Only this year did the family end the search. Guy and Nina were both dead, and for the first time the name Raoul—always reserved for the man who would return—had been bestowed on a new child. In March the Swedish Tax Agency was asked, if Raoul had not appeared to register by October 14th, to announce a legal date of death for him. Calculating five years since the “heart attack” in Lubyanka, neatened to the end of the month, this was given as July 31st 1952. The fiction served.

The family held their own memorial service at Lidingö, by the briefcase with his initials. No smiling figure came rushing through the birch trees, towards the lake, to pick it up. His work, though—the duty of each moral man to face down tyranny—would never be done. The briefcase waited, and its name was “Hope”. ■